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ADMIRALTY EXPERIMENT WORKS HASLAR (ENGLAND)

F/G 13/10

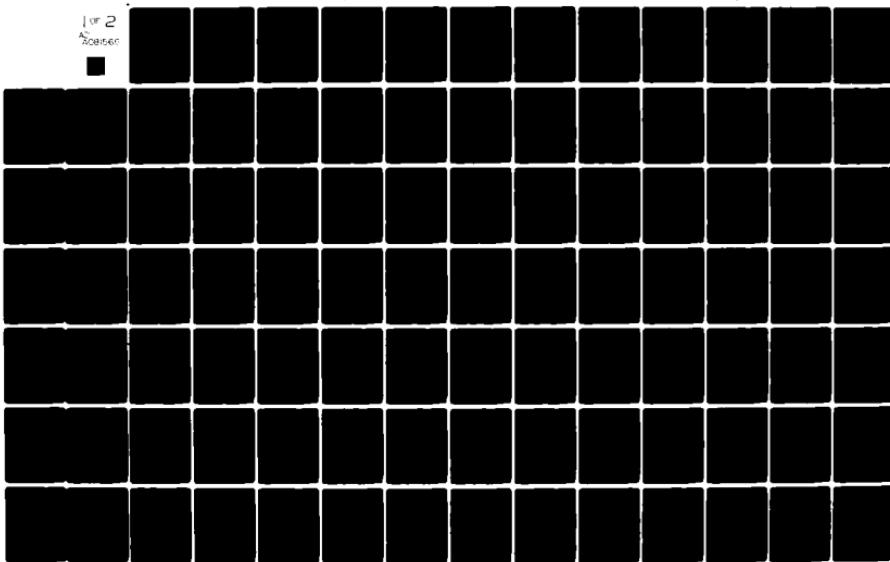
SEA KNIFE ANALYSIS OF SELECTED SEAKEEPING DATA. VOLUME 2. FIGUR—ETC(U)

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UNCLASSIFIED AEW-TR-N76038-VOL-2

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1 OF 2  
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AEW TR N76034

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2627 AEW-TR-N76034-Vol-2  
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**AEW**

SEA KNIFE  
ANALYSIS OF SELECTED SEAKEEPING DATA.  
VOLUME 2, FIGURES.

10 M.A. Hammond

K/Nicholson

AEW TR N76034-10

ADMIRALTY EXPERIMENT WORKS

HASLAR GOSPORT

HAMPSHIRE PO 12 2AG

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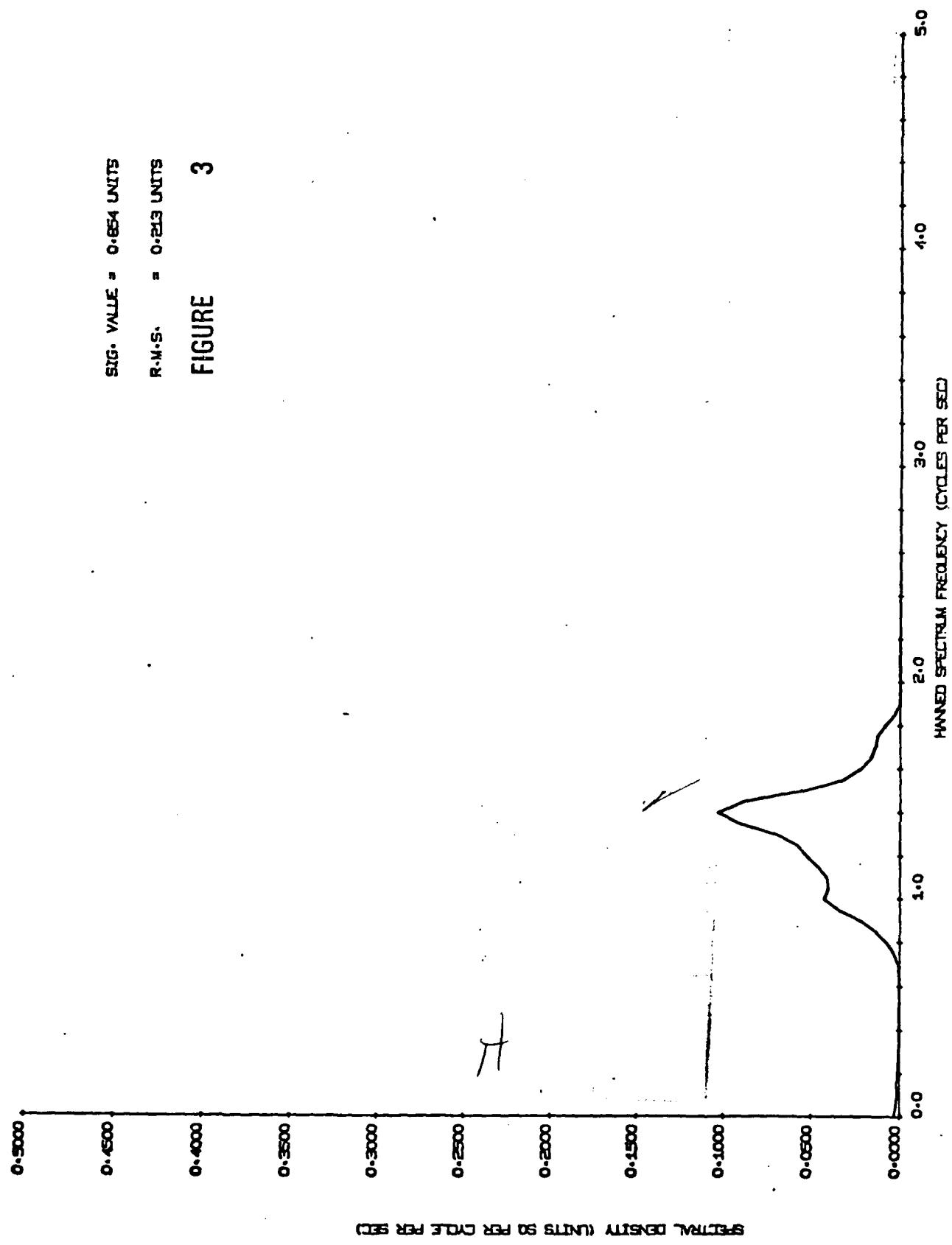
Nov 1976

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## SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number)  This report presents the results of spectral analysis on a selection of seakeeping tests carried out on a 1/16 full size model of SEA KNIFE. SEA KNIFE is an experimental planing hull design.		

SEAKNAFE TESTS NO.1 SET MAY '76 - RUN 87B PITCH SPECTRUM - UNITS IN DEGREES

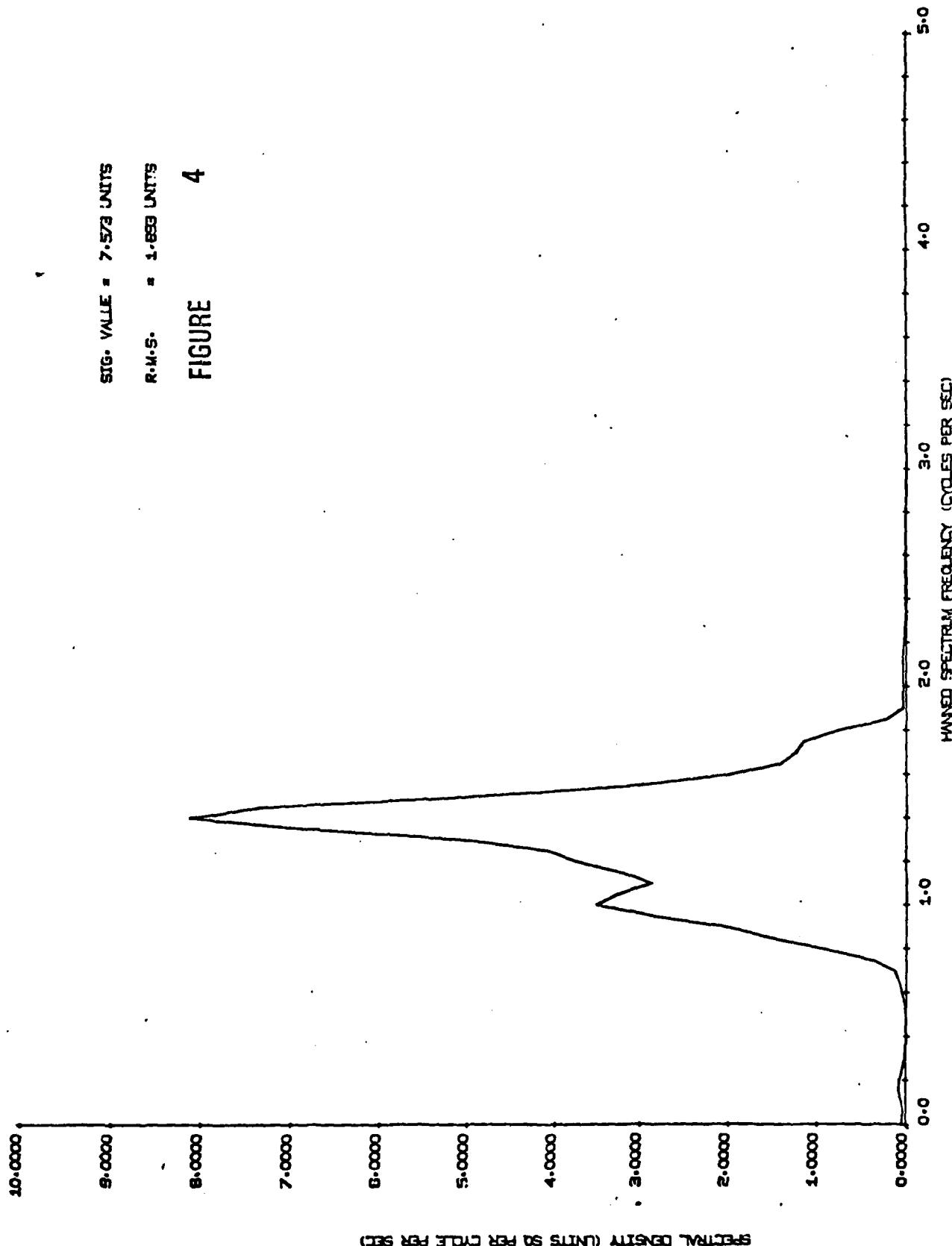


SEAKNIFE TESTS NO.1 SAT MAY '76 - RUN 878 HEAVE SPECTRUM - UNITS CENTIMETRES

SIG. VALUE = 7.573 UNITS

R.M.S. = 1.863 UNITS

FIGURE  
4

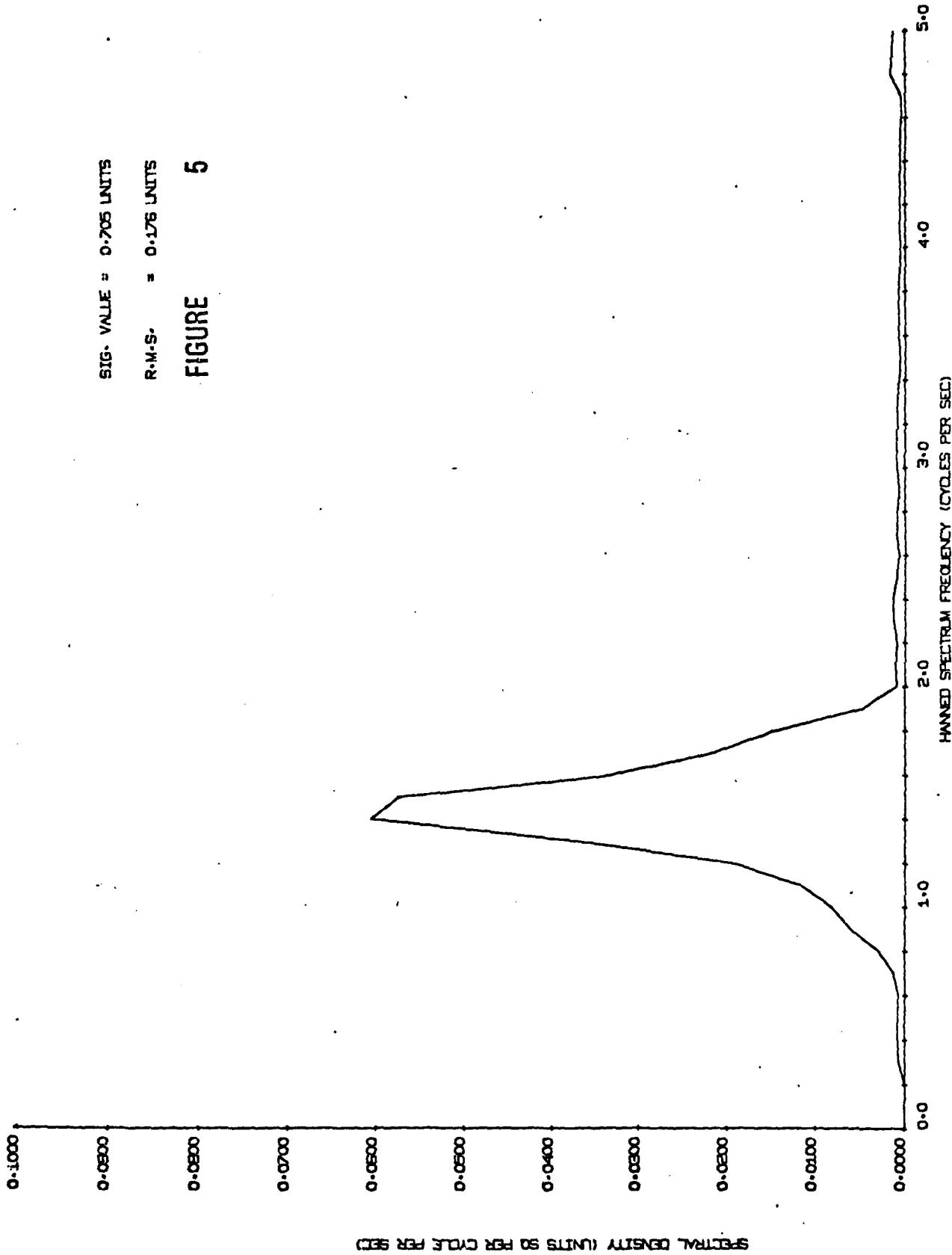


SEAWARF TESTS NO.1 S/T MAY '76 - RUN 878 VERT.G AT C.G. SPECTRUM UNITS G.S

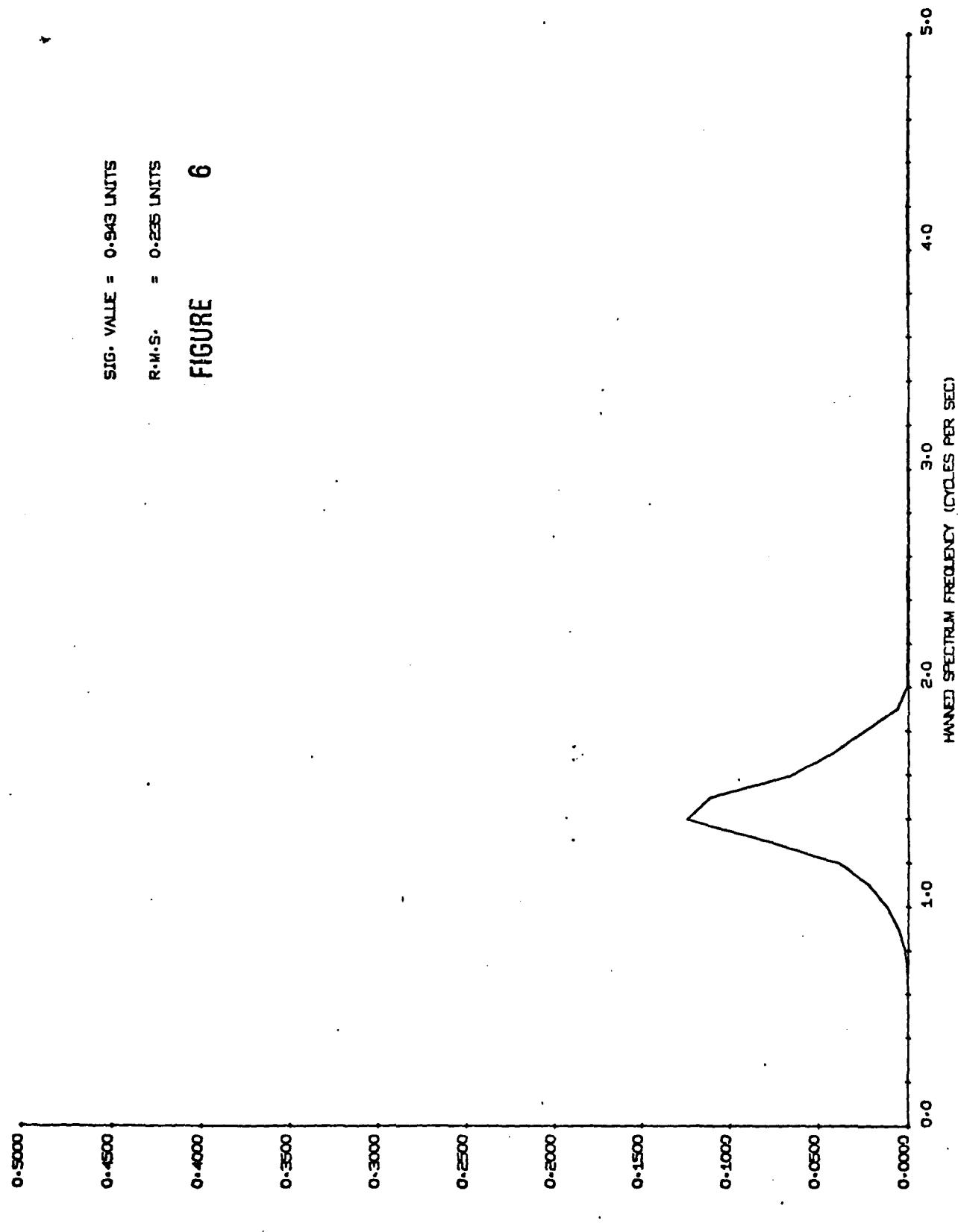
SIG. VALUE = 0.705 UNITS

R.M.S. = 0.176 UNITS

FIGURE 5



SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN 878 VERT.G AT BOW SPECTRUM UNITS G.S

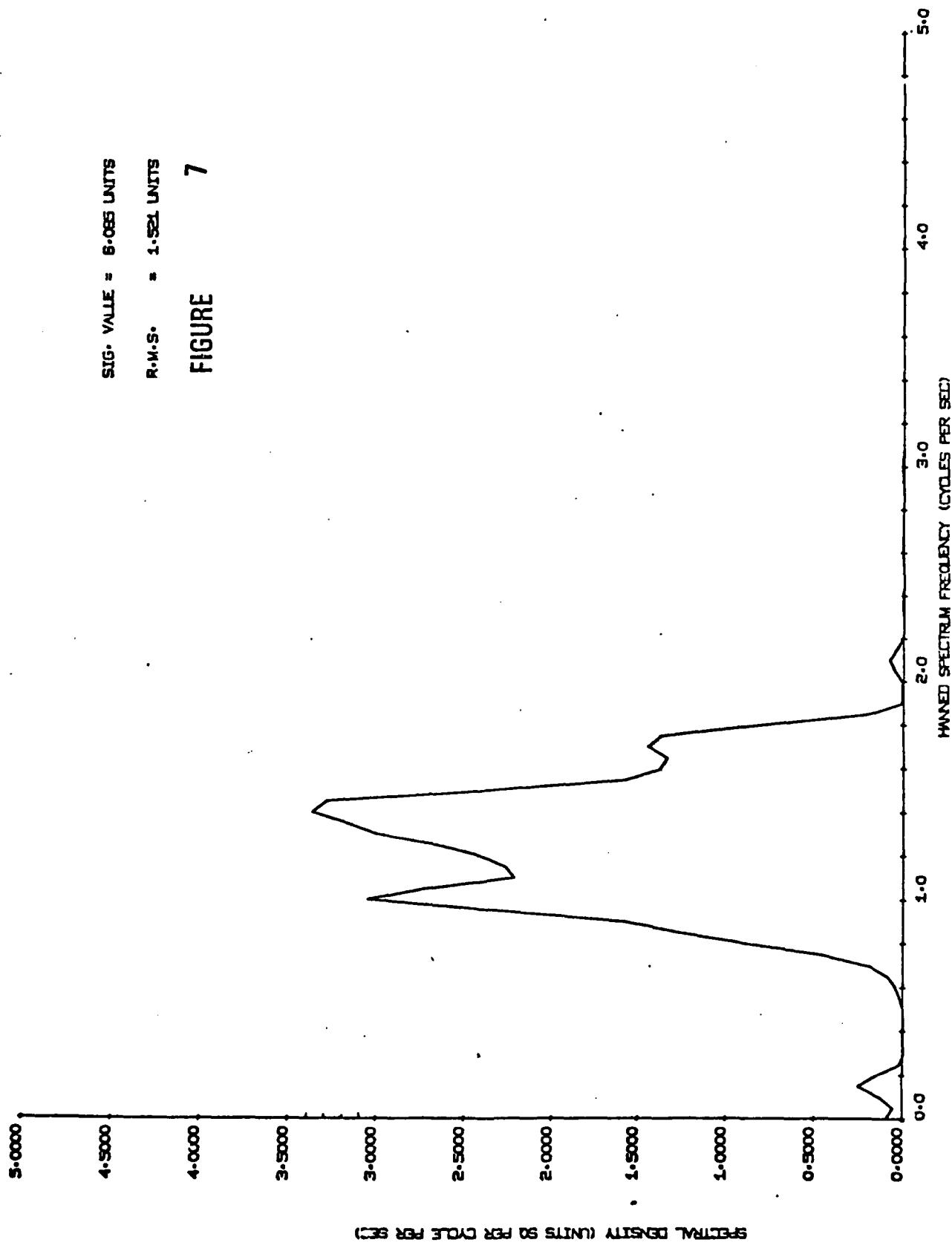


SEAWARFE TESTS NO.1 SAT MAY '76 - RUN 878 ENCOUNTERED WAVE SPECTRUM - UNITS CM

SIG. VALUE = 6.065 UNITS

R.M.S. = 1.321 UNITS

FIGURE 7

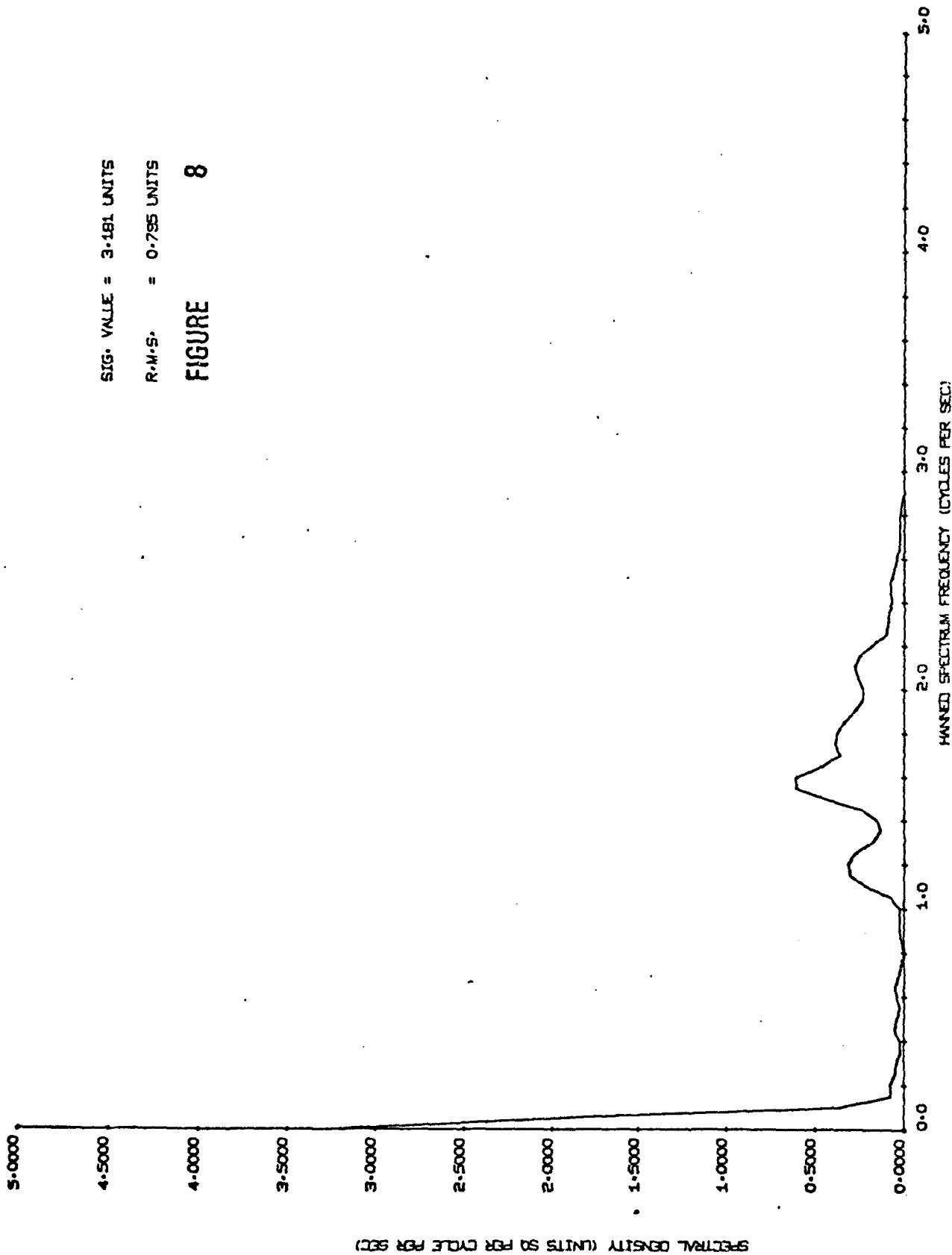


SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN 879 PITCH SPECTRUM - UNITS DEGREES

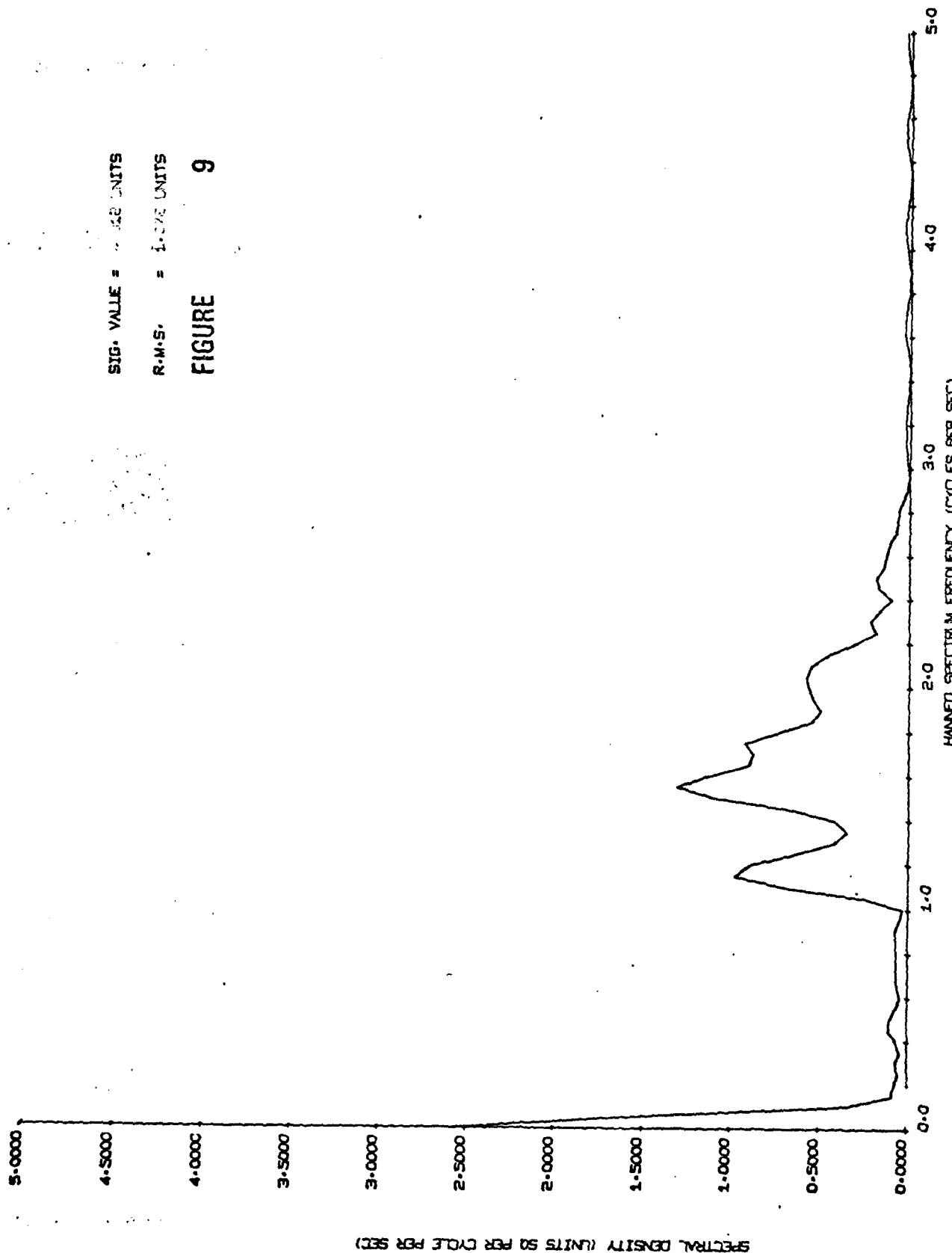
SIG. VALUE = 3.181 UNITS

R.M.S. = 0.785 UNITS

FIGURE 8



SYNTHETIC TESTS NO. 1 MAY '70 - RLN 67B PEAK SPECTRUM UNITS CENTIMETRES

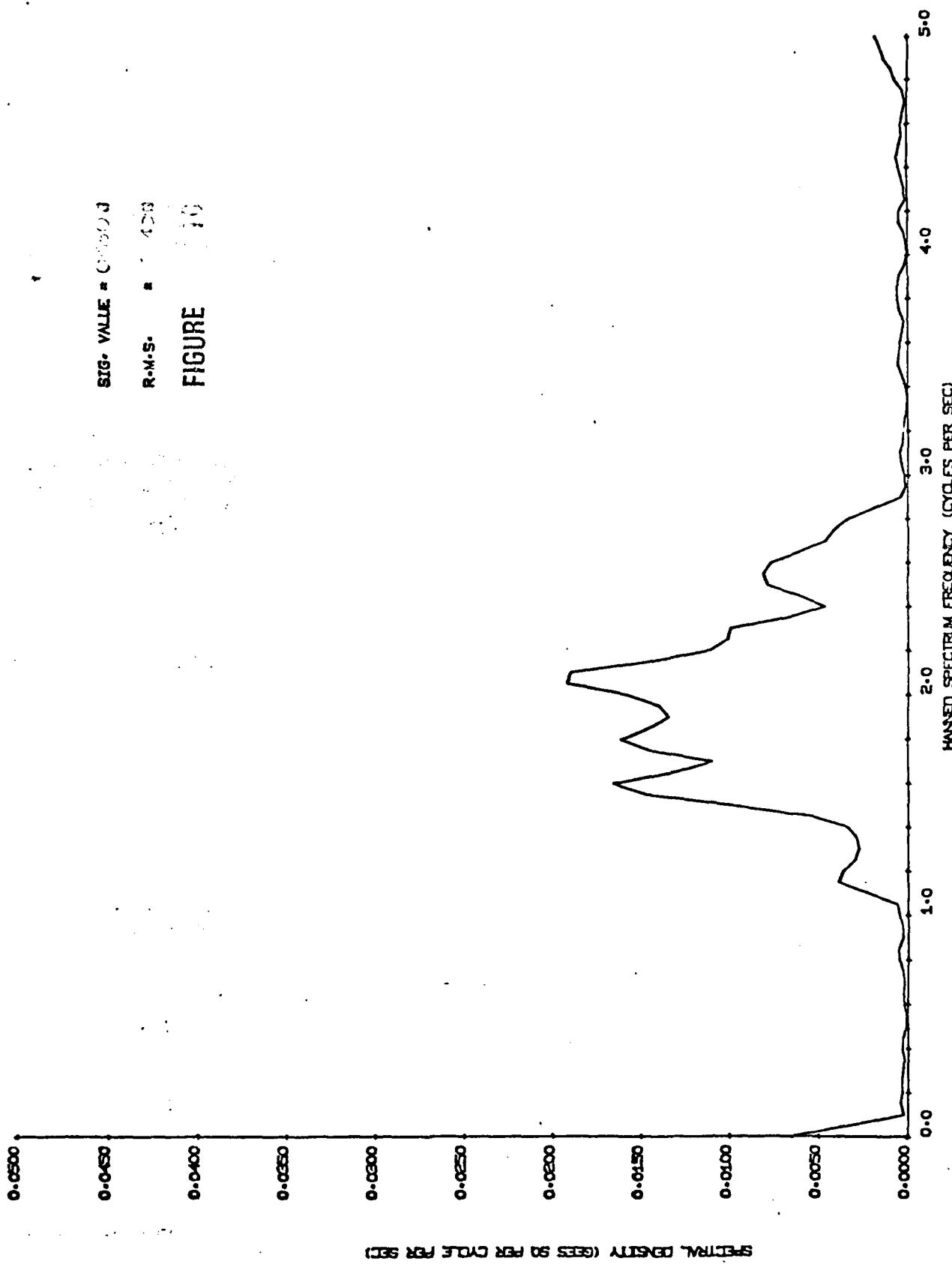


SCANNING TESTS NO.1 SUR MAY 17<sup>th</sup> - RUN 879 VERT. AT CG SPECTRUM

SIG. VALUE = 0.0554 J

R.M.S. = 4.73

FIGURE 10

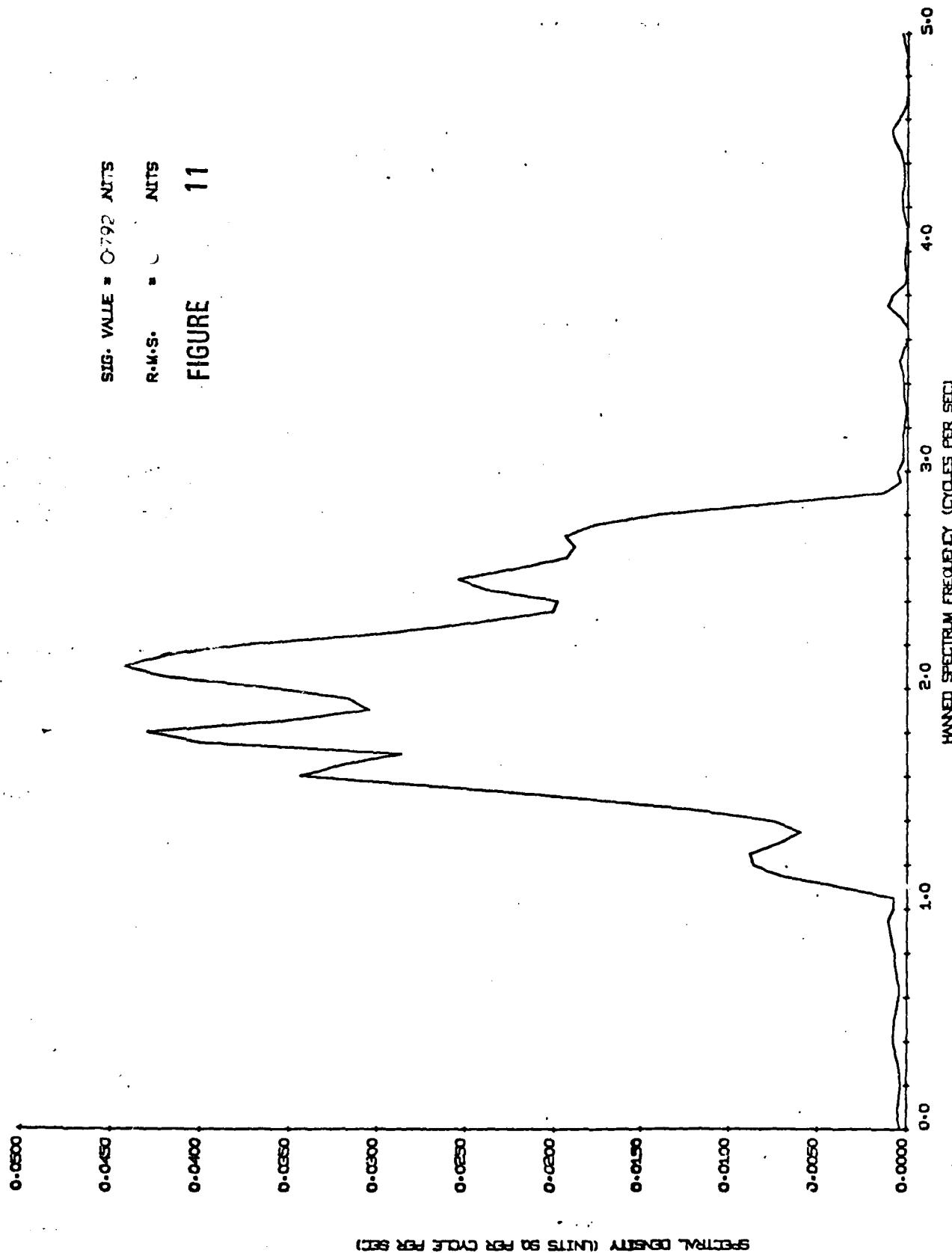


KNIFE TESTS NO. 27 MAY '76 - RUN NUMBER 5 AT BC IN WIM UNITS G-S

SIG. VALUE = 0.792 NITS

R.M.S. = 0.0 NITS

FIGURE 11

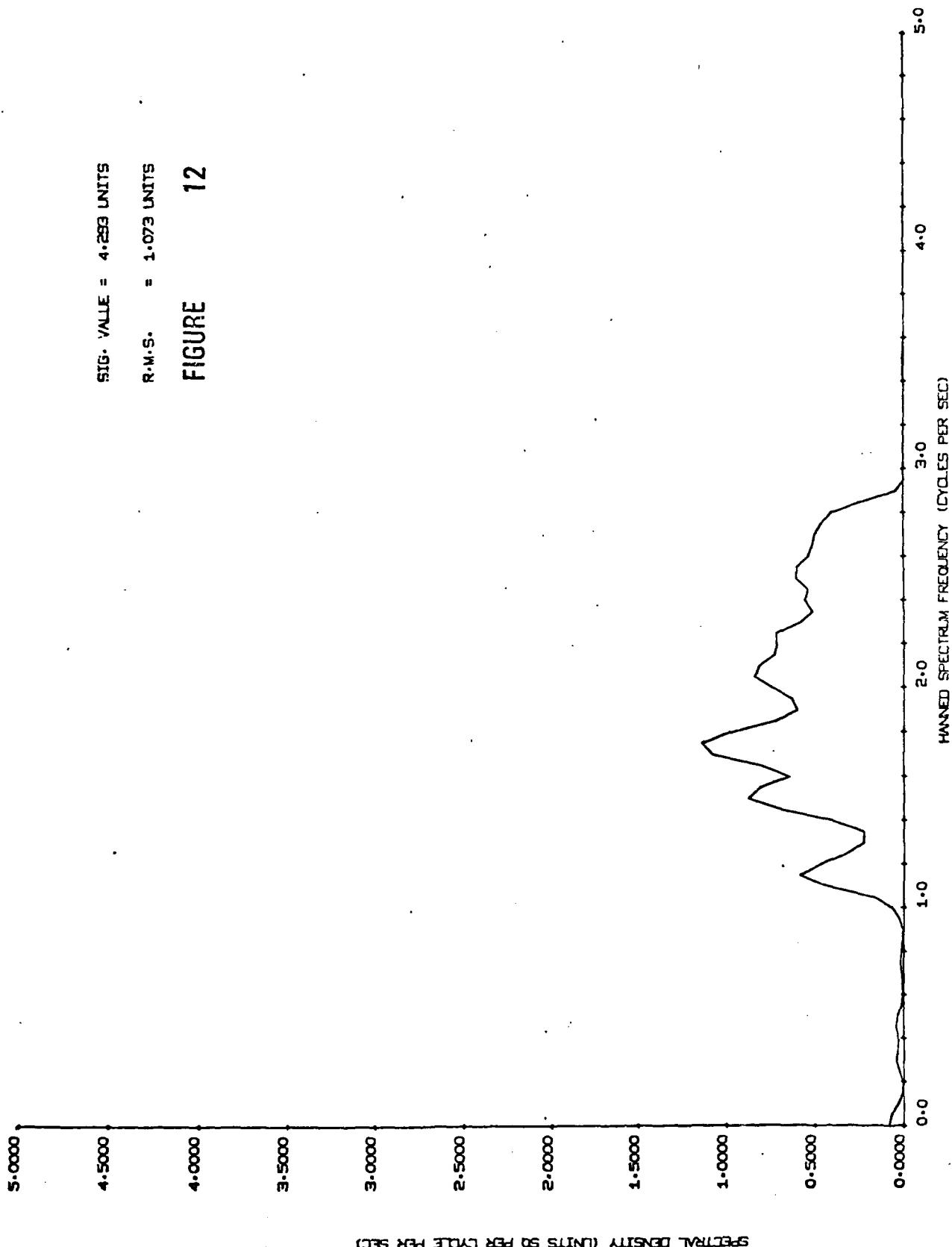


SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN 879 ENCOUNTERED WAVE SPECTRUM - UNITS CMS

SIG. VALUE = 4.293 UNITS

R.M.S. = 1.073 UNITS

FIGURE 12

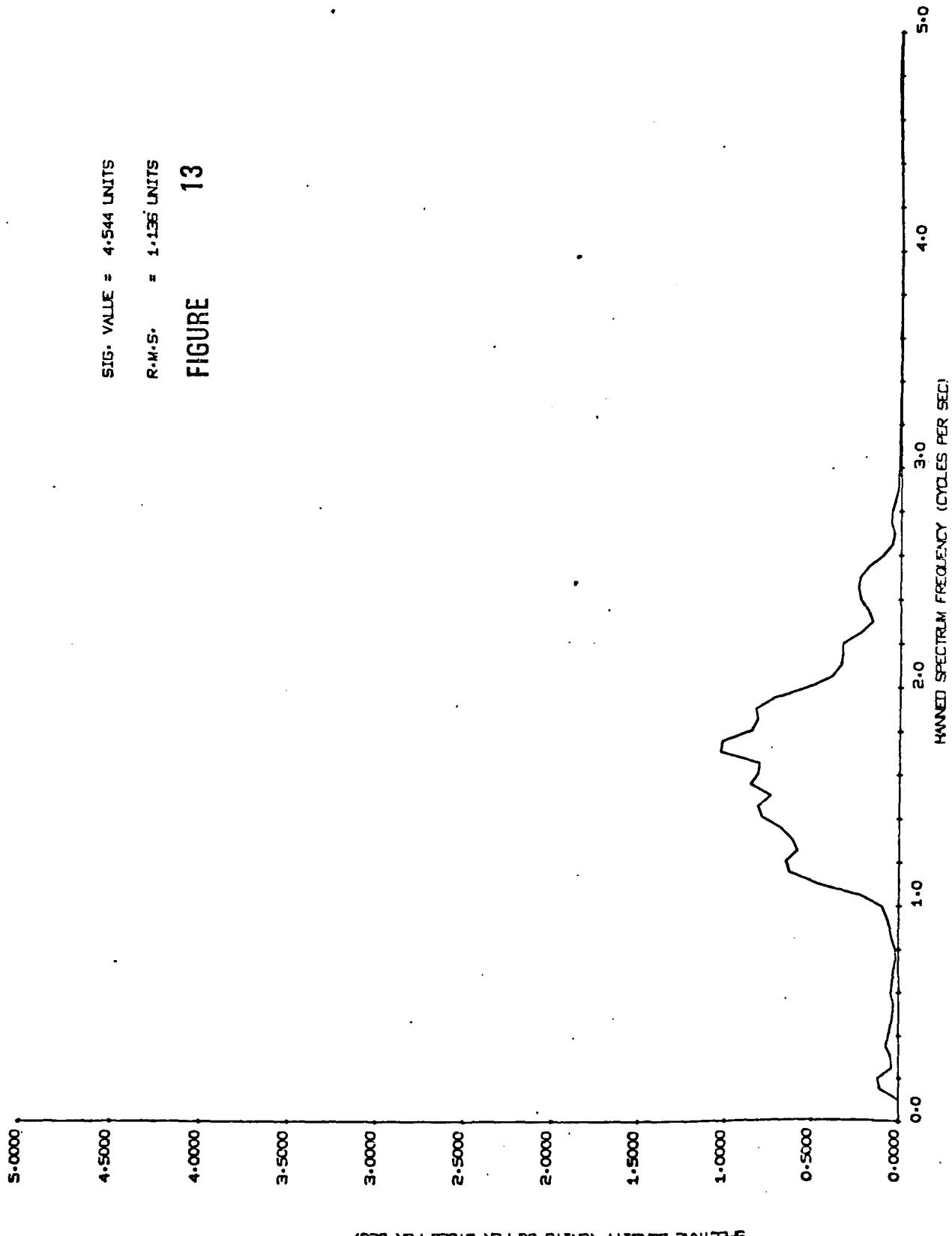


SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN 883 PITCH SPECTRUM - UNITS DEGREES

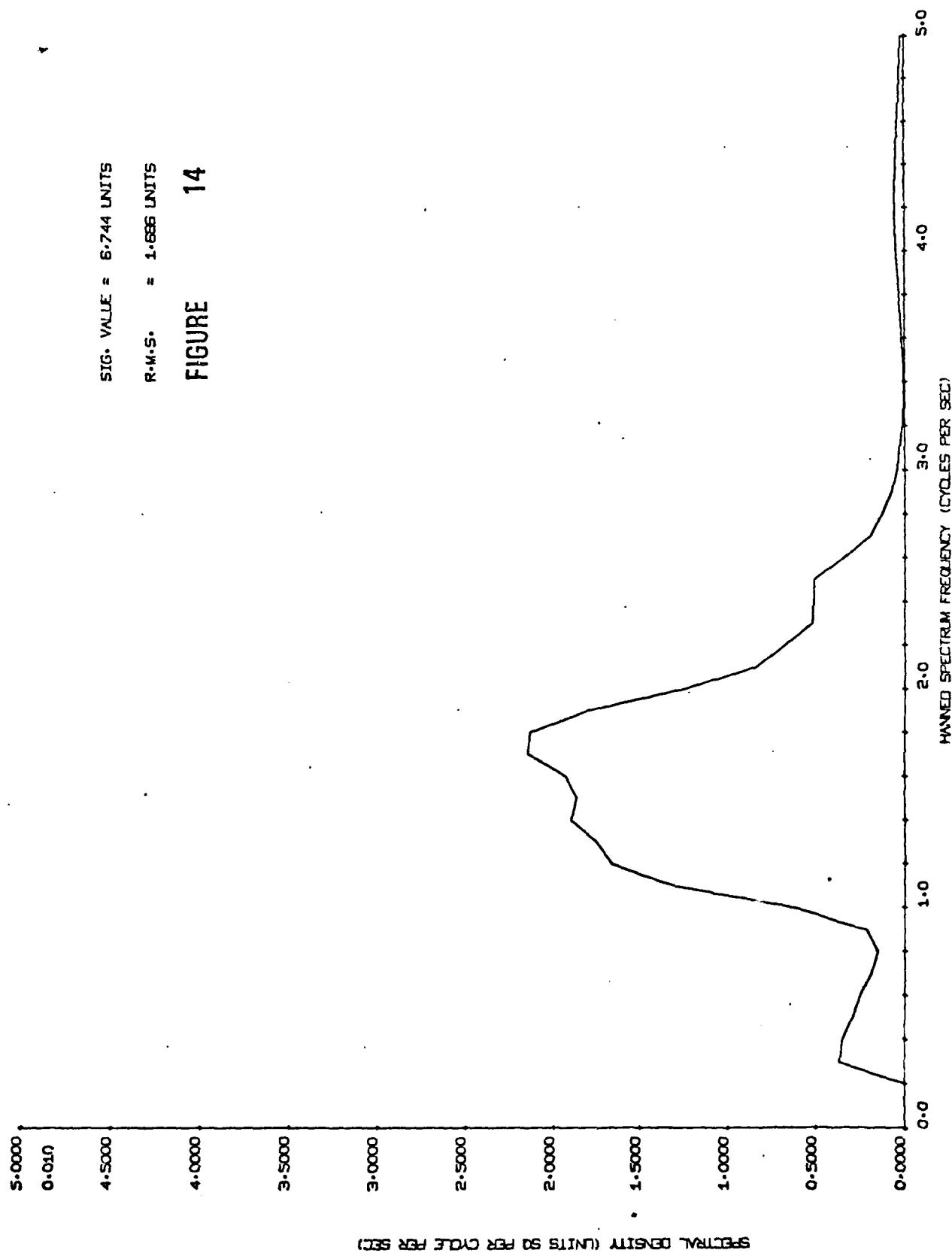
SIG. VALUE = 4.544 UNITS

R.M.S. = 1.136 UNITS

FIGURE 13



0.050 SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN 883 HEAVE SPECTRUM - UNITS CENTIMETRES

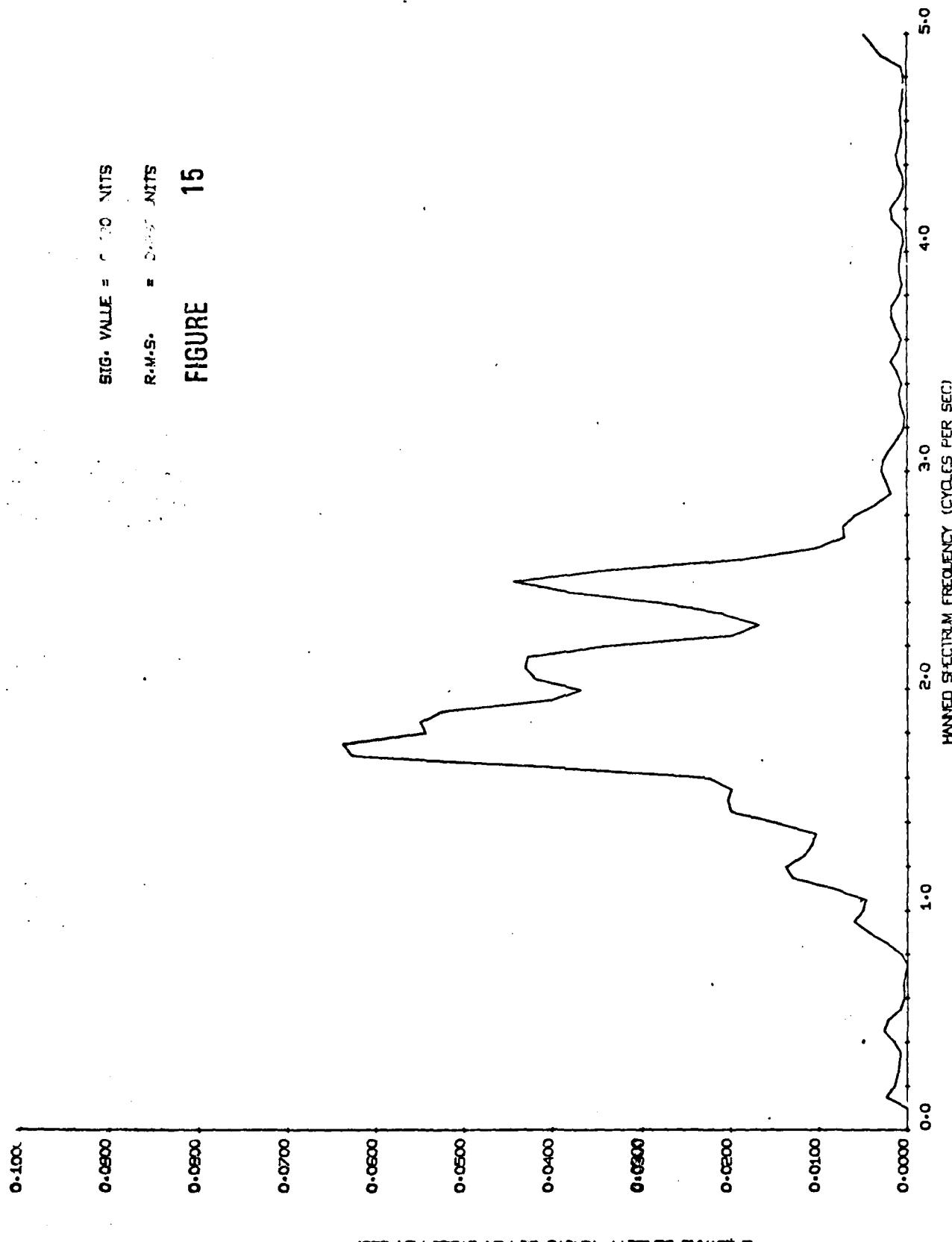


S. K. TESTS NO. 75 MAY '73 - RUN BEE VFRG AT C.L. 1000 UNITS G.S.

SIG. VALUE = 0.130 NITS

R.M.S. = 0.035 NITS

FIGURE 15

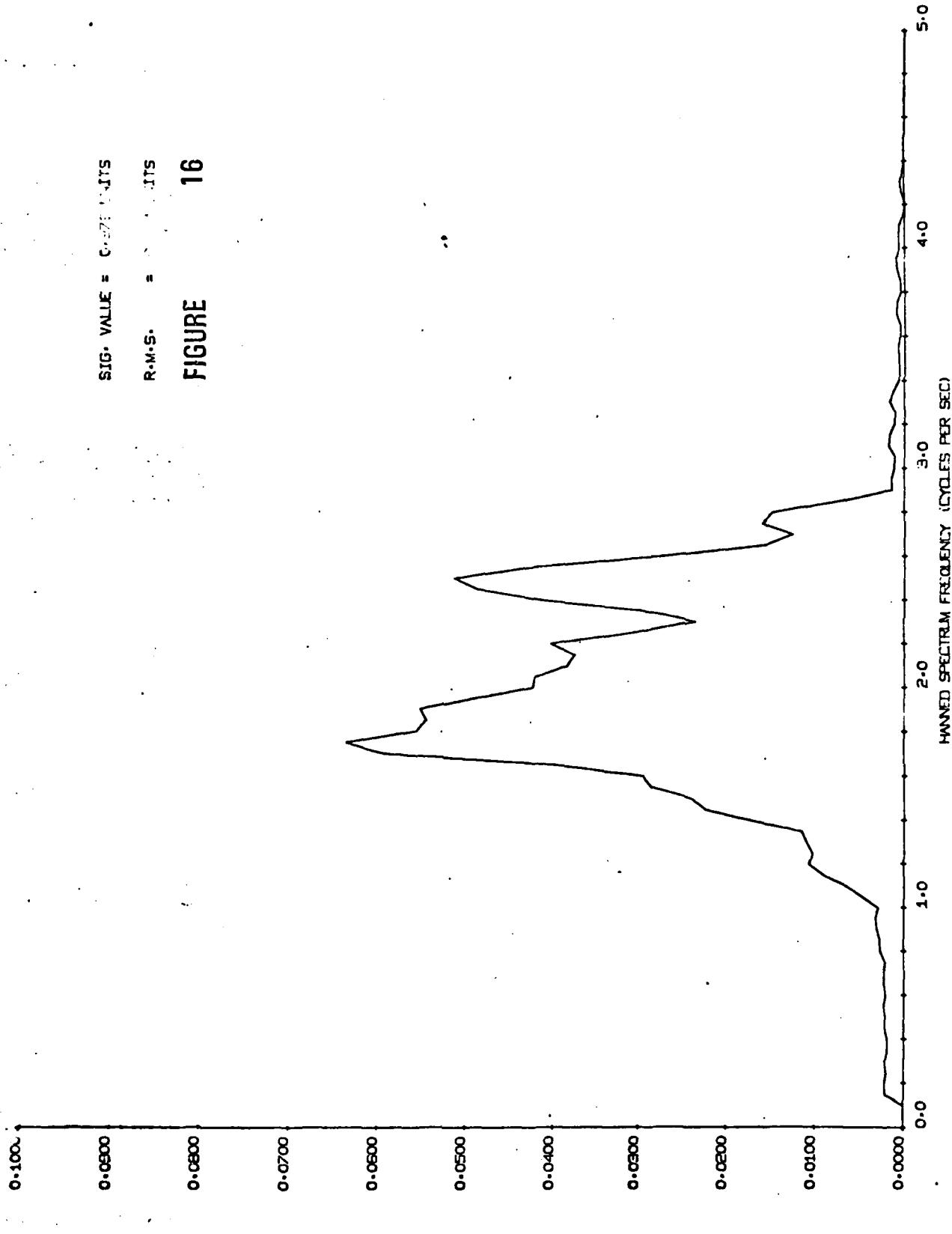


SKINIFE TESTS NO. 15 MAY 1965 - RUN BB. V.T.R. AT BOW SPECTRUM UNITS G.S

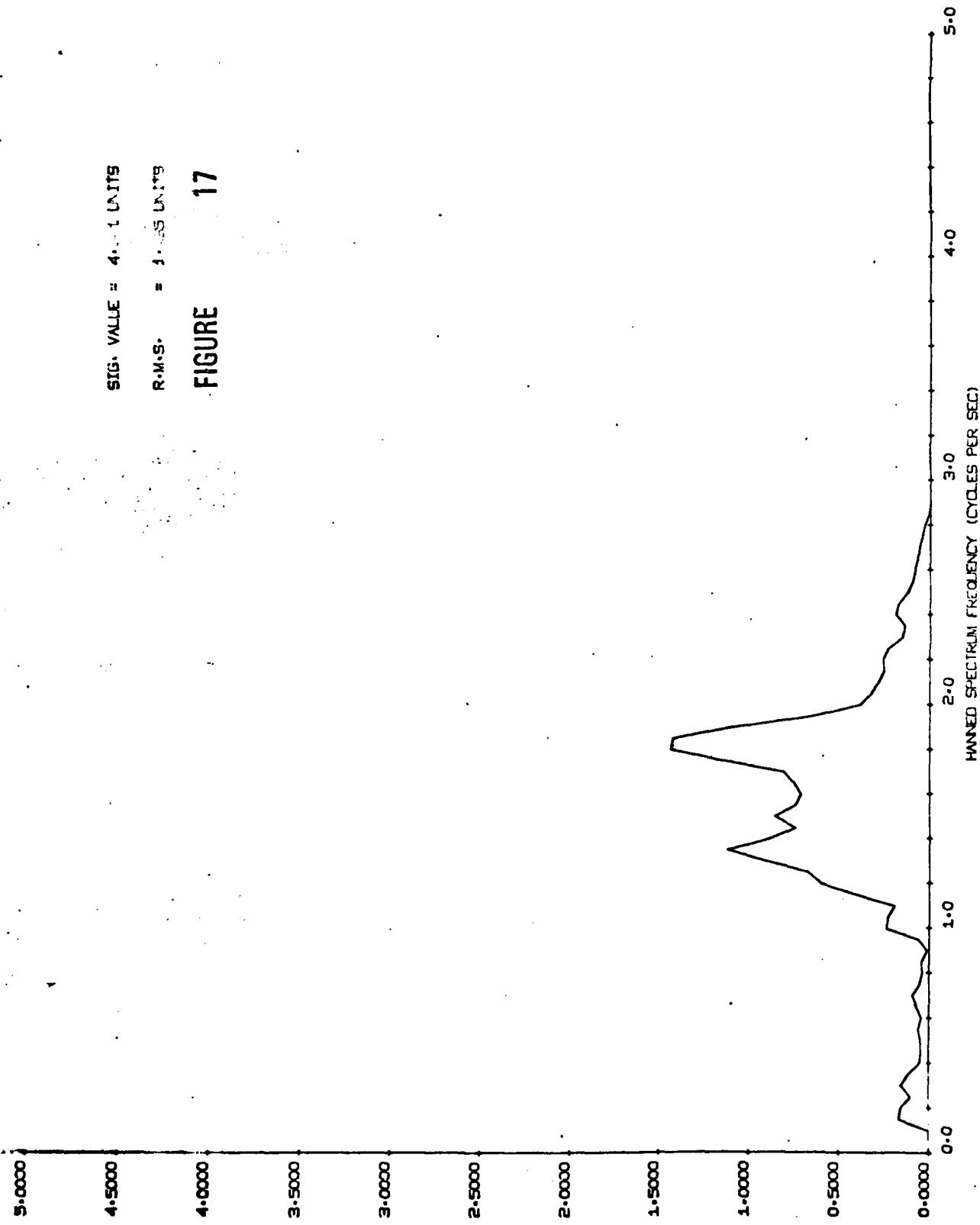
SIG. VALUE = 0.271 UNITS

R.M.S. = 0.141 UNITS

FIGURE 16



SEASCOPE TESTS NO.1 S-1 MAY 1965 - RUN 684 PITCH SPECTRUM

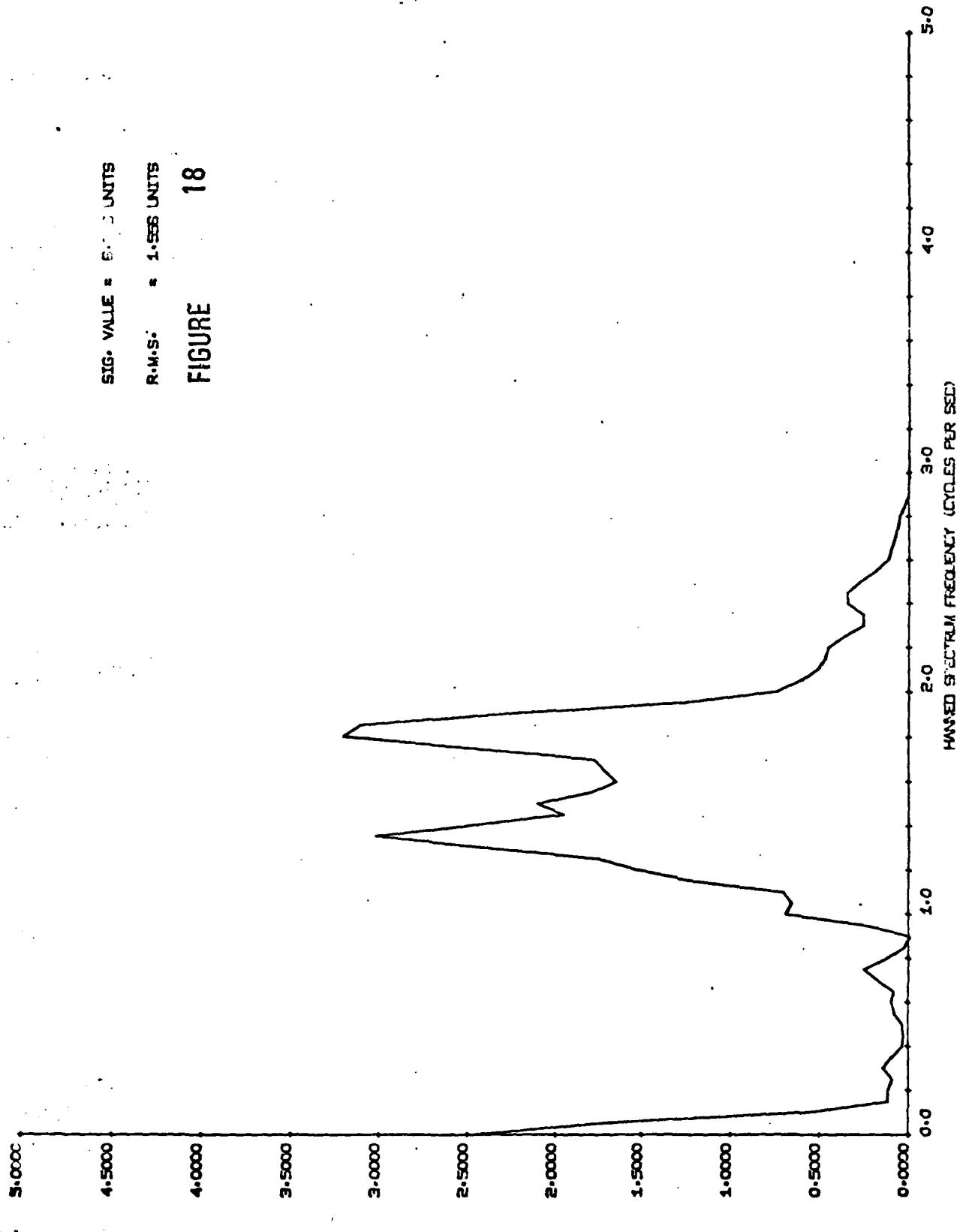


SEAWAVE TESTS NO. 125 - MAY 1953 - RUN BEING SPECTRUM TESTS CENTIMETRES

SIG. VALUE = 6.12 UNITS

R.M.S. = 1.996 UNITS

FIGURE 18

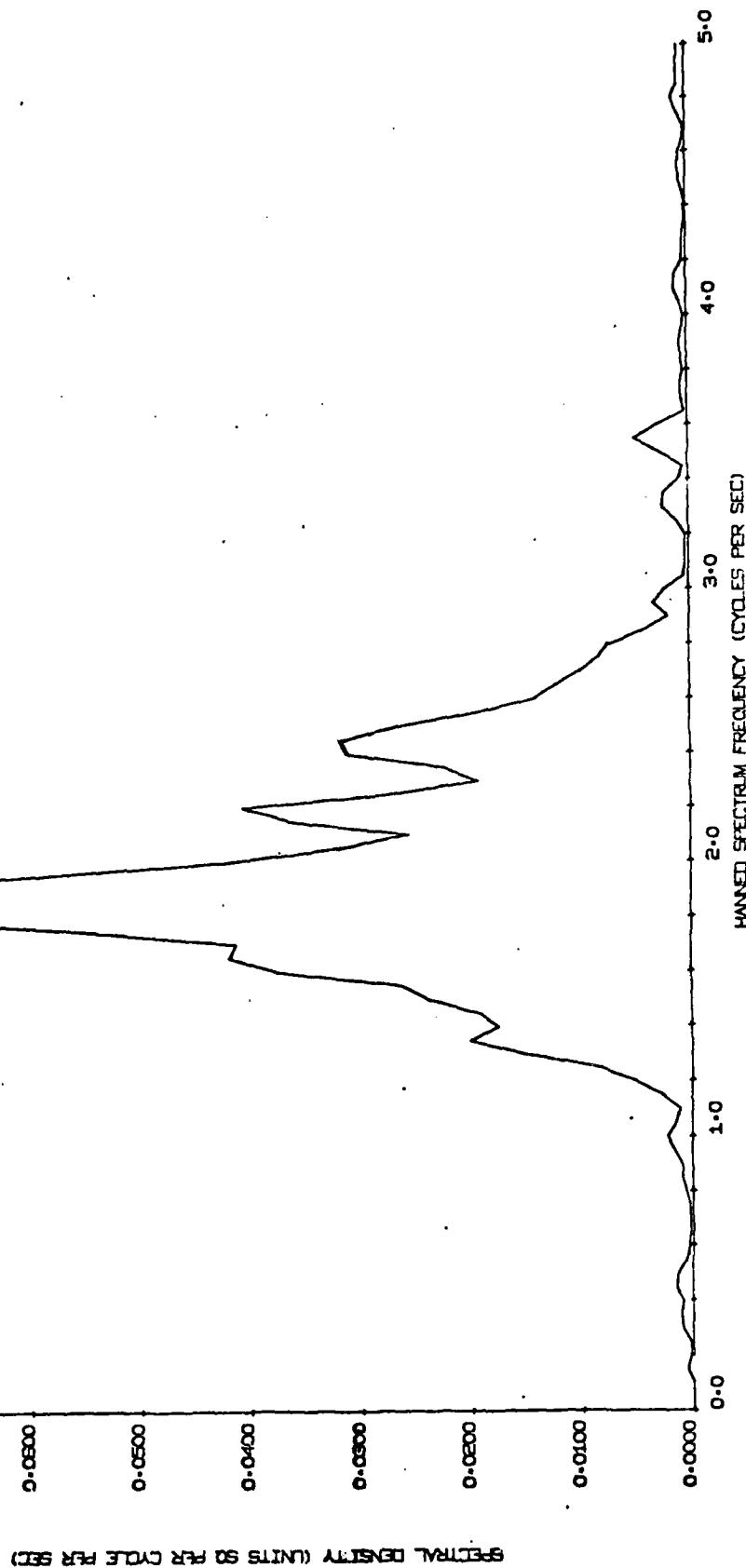


SPECTRAL DENSITY (UNITS SA PER CYCLE PER SEC)

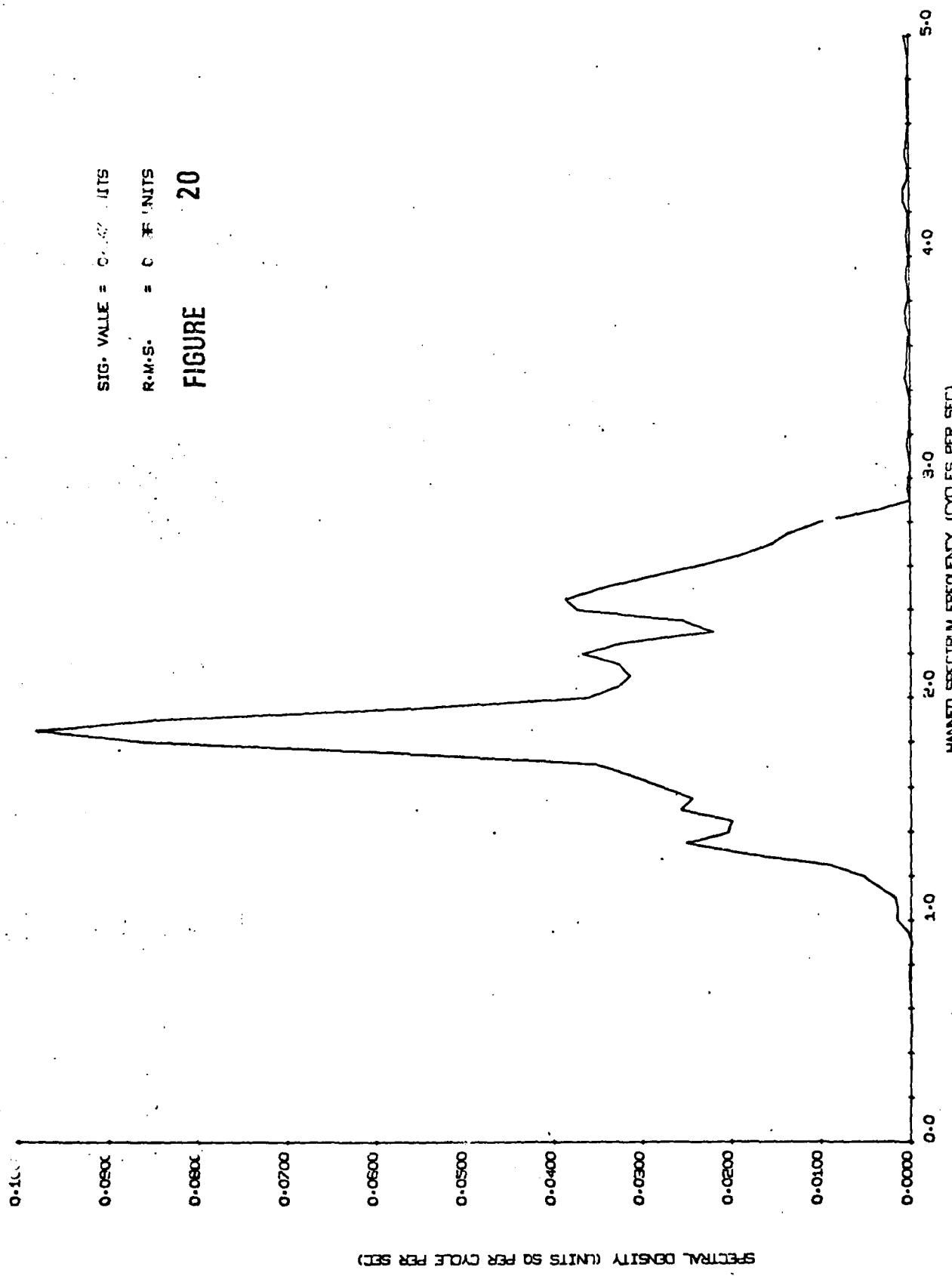
TESTS NO. 375 - MAY '76 - RUN 984 VERT AT C.G. UNITS G.S.

SIG. VALUE = 0.1000  
R.M.S. = 0.00100

FIGURE 19



STANGLIFE TESTS NO. 157 MAY 1961 - RUN BEING WRITTEN AT BOW UNITS G.S

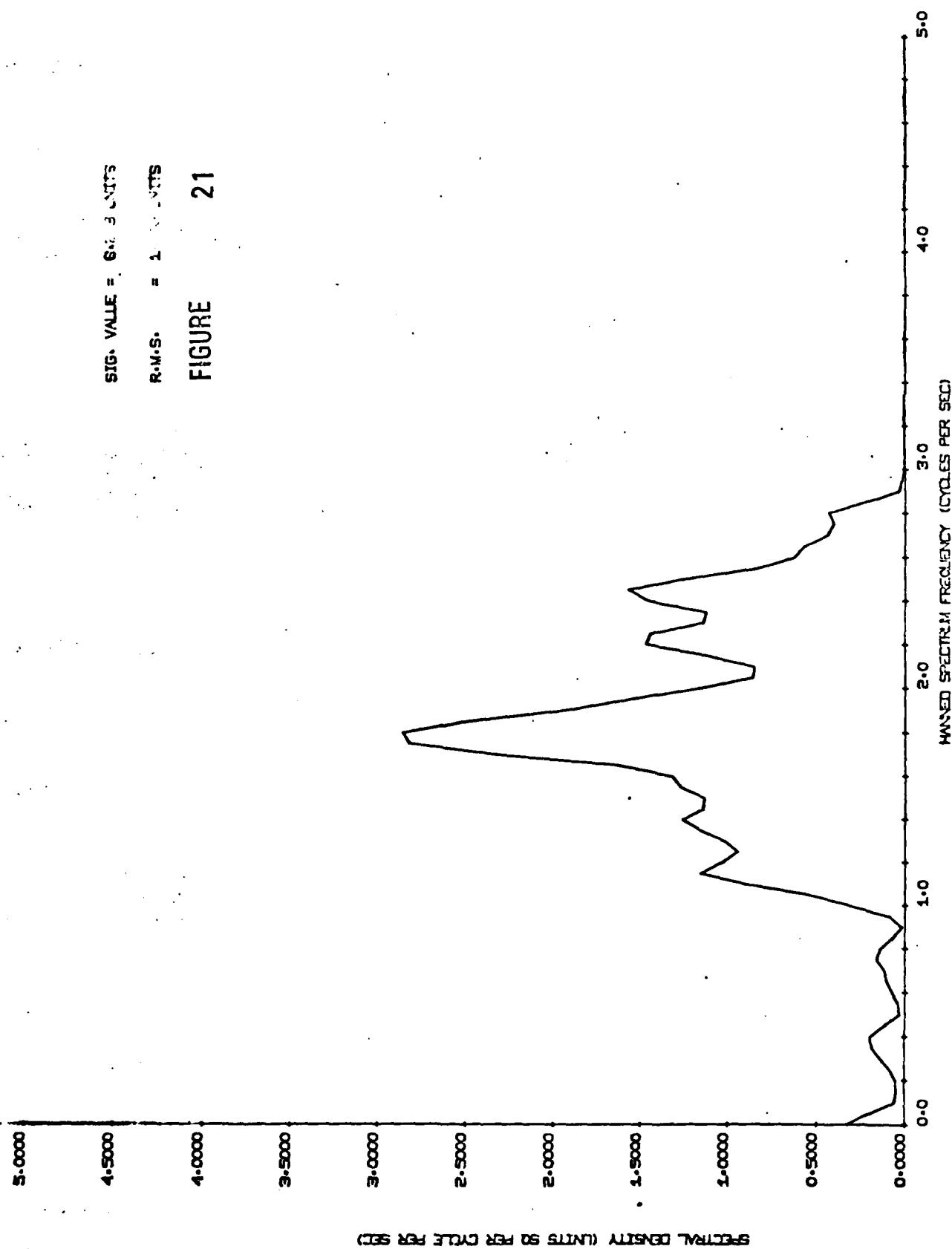


SEANNITE TESTS NO. 5 - MAY 1971 - RUN 884 C CENTERED WAVEFORM - UNITS OVS

SIG. VALUE = 6.0 ± 3.0 UTS

R.M.S. = 1.0 ± 0.0 UTS

FIGURE 21



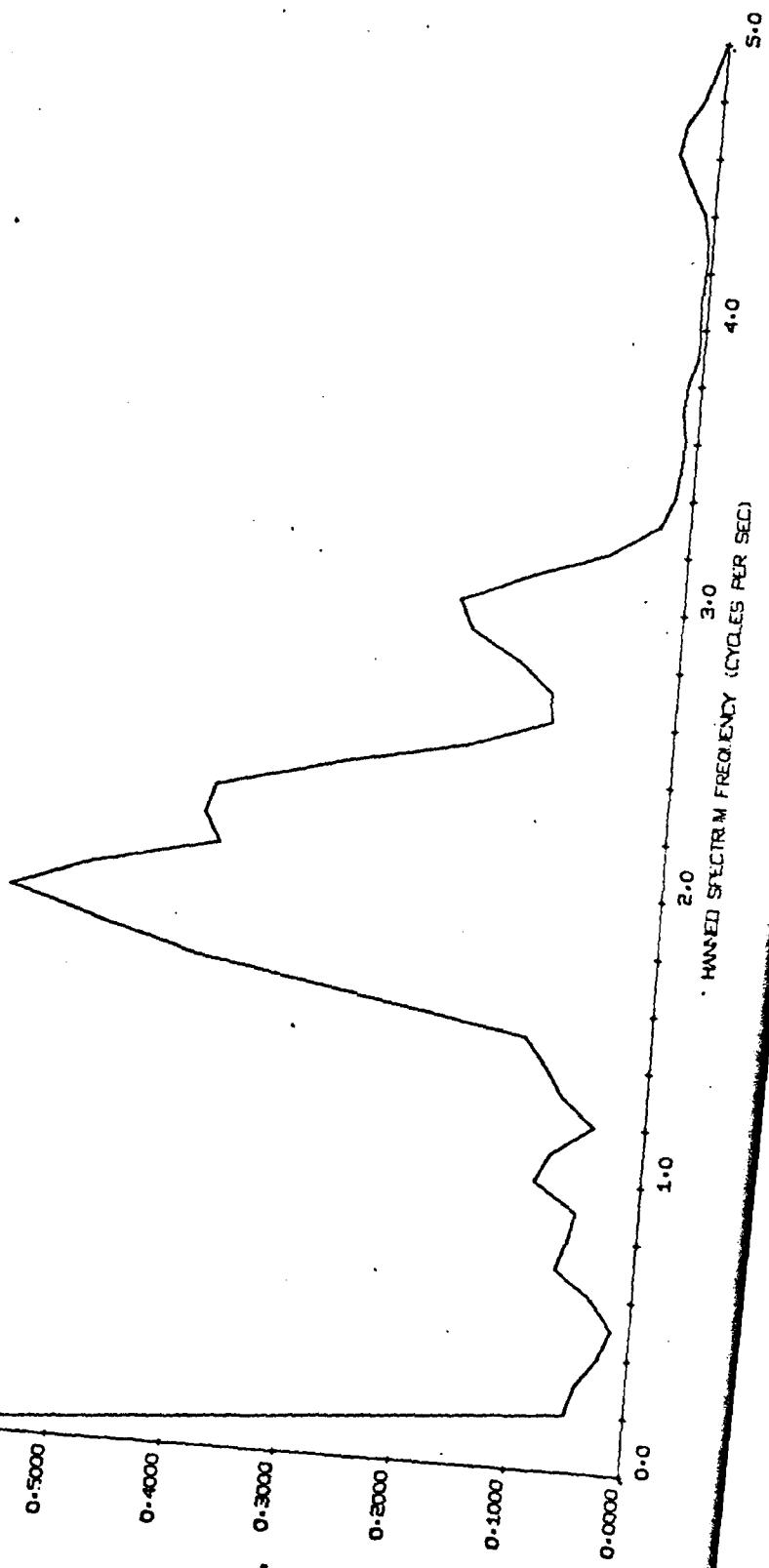
SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN 889 PITCH SPECTRUM UNITS DEGREES

SIG. VALUE = 3.253 UNITS

R.M.S. = 0.883 UNITS

FIGURE  
22

SPECTRAL DENSITY (UNITS SD PER CYCLE PER SEC)



SETS NO. 23 WAY 1 - FUN 88 HAWAII SPECTRAL DENSITY TREES

5.0000

4.5000

4.0000

3.5000

3.0000

2.5000

2.0000

1.5000

1.0000

0.5000

0.0000

SPECTRAL DENSITY (UNITS SQ PER CYCLE PER SEC)

SIG. VALUE = 5.12 RMS

R.M.S. = 4.12 UNITS

FIGURE 23

HAWAII SPECTRUM FREQUENCY (CYCLES PER SEC)

5.0

4.0

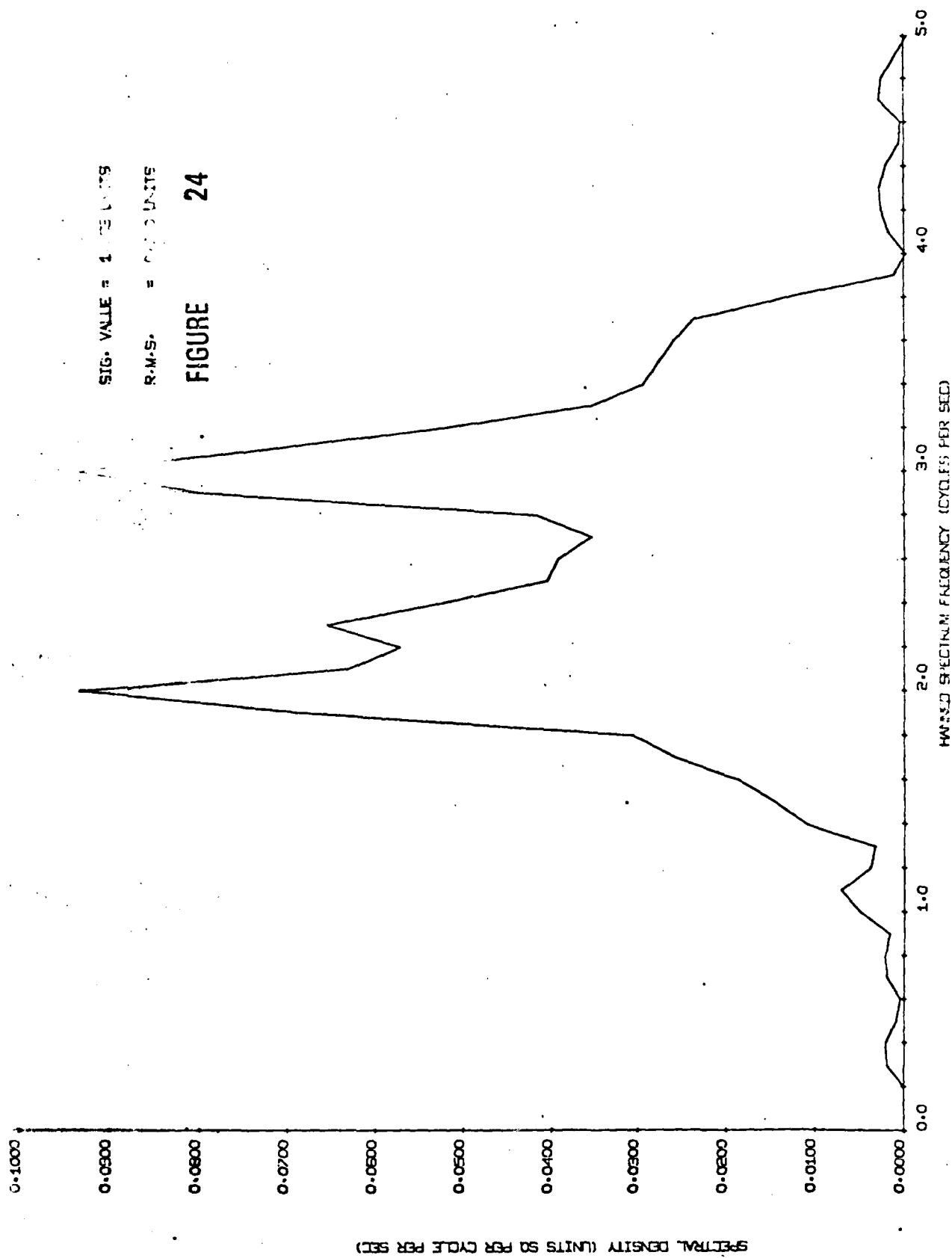
3.0

2.0

1.0

0.0

KNIFE TESTS NO. 5 MAY '75 - RUN 881 VERT. 3 AT 5.0 CYCLES PER SEC UNITS 5.5



SEAN - E TESTS NO. 1 AT MAY 15 - RUN E IN VIBRAT. G AT BR UNIT GAS

0.5000

0.4500

0.4000

0.3500

0.3000

0.2500

0.2000

0.1500

0.1000

0.0500

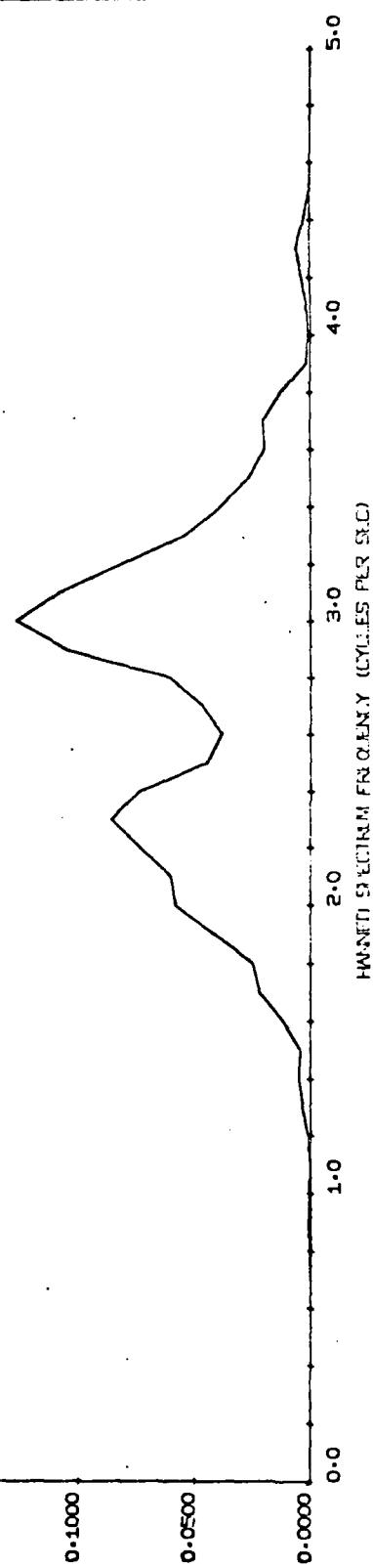
0.0000

SPECTRAL DENSITY (UNITS SA PER CYCLE PER SEC)

SIG. VALUE = 0.42E NITS

R.M.S. = 0.357 NITS

FIGURE  
25



HARMONIC FREQUENCY (CYCLES PER SEC)

STATION NO. 37 MAY 19 - RUN 8802 ENTERED 4/17/70 UNITS DMS

10.000

9.000

8.000

7.000

6.000

5.000

4.000

3.000

2.000

1.000

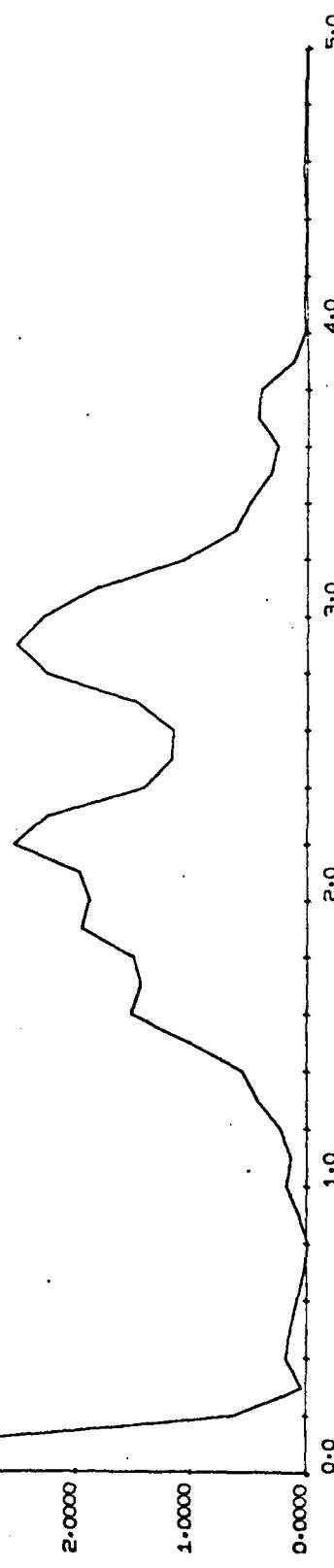
0.000

SPECTRAL DENSITY (UNITS AS PER CYCLE PER SEC)

HANDED SPECTRUM FREQUENCY (CYCLES PER SEC)

SIG. VALUE = 8.15 UNITS  
R.M.S. = 2.15 UNITS

FIGURE  
26



STANIFIRE TESTS NO. 51, MAY '71 - RUN B9, PTT SPECTRUM

DEGREES

1.0000

0.8000

0.6000

0.4000

0.2000

0.1000

0.0500

0.0200

0.0100

0.0050

0.0000

SPECTRAL DENSITY (UNITS SD PER CYCLE PER SEC)

5.0

4.0

3.0

2.0

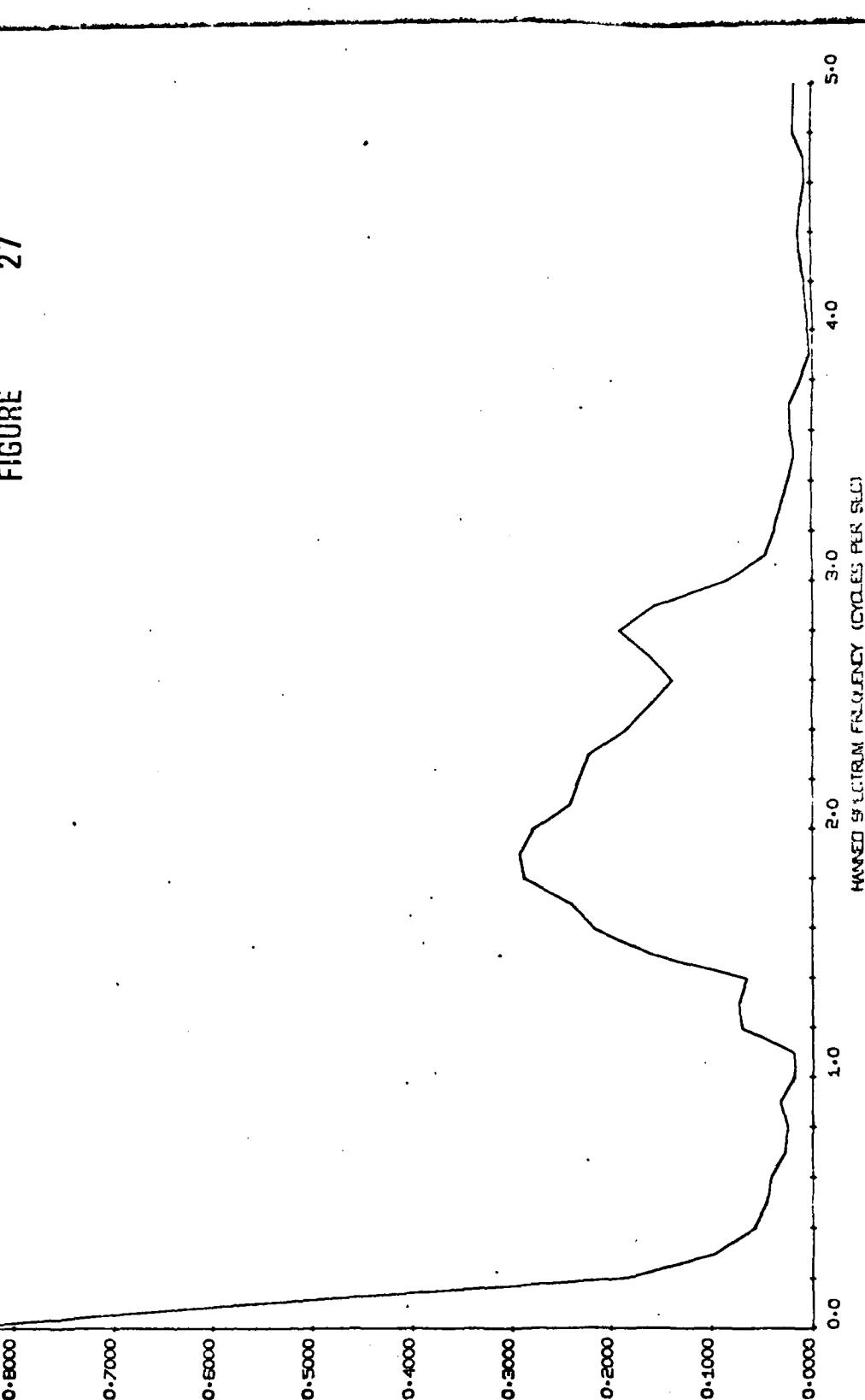
1.0

0.0

SIG. VALUE = 2.1 DEGREES

R.M.S. = 0.11 UNITS

FIGURE 27

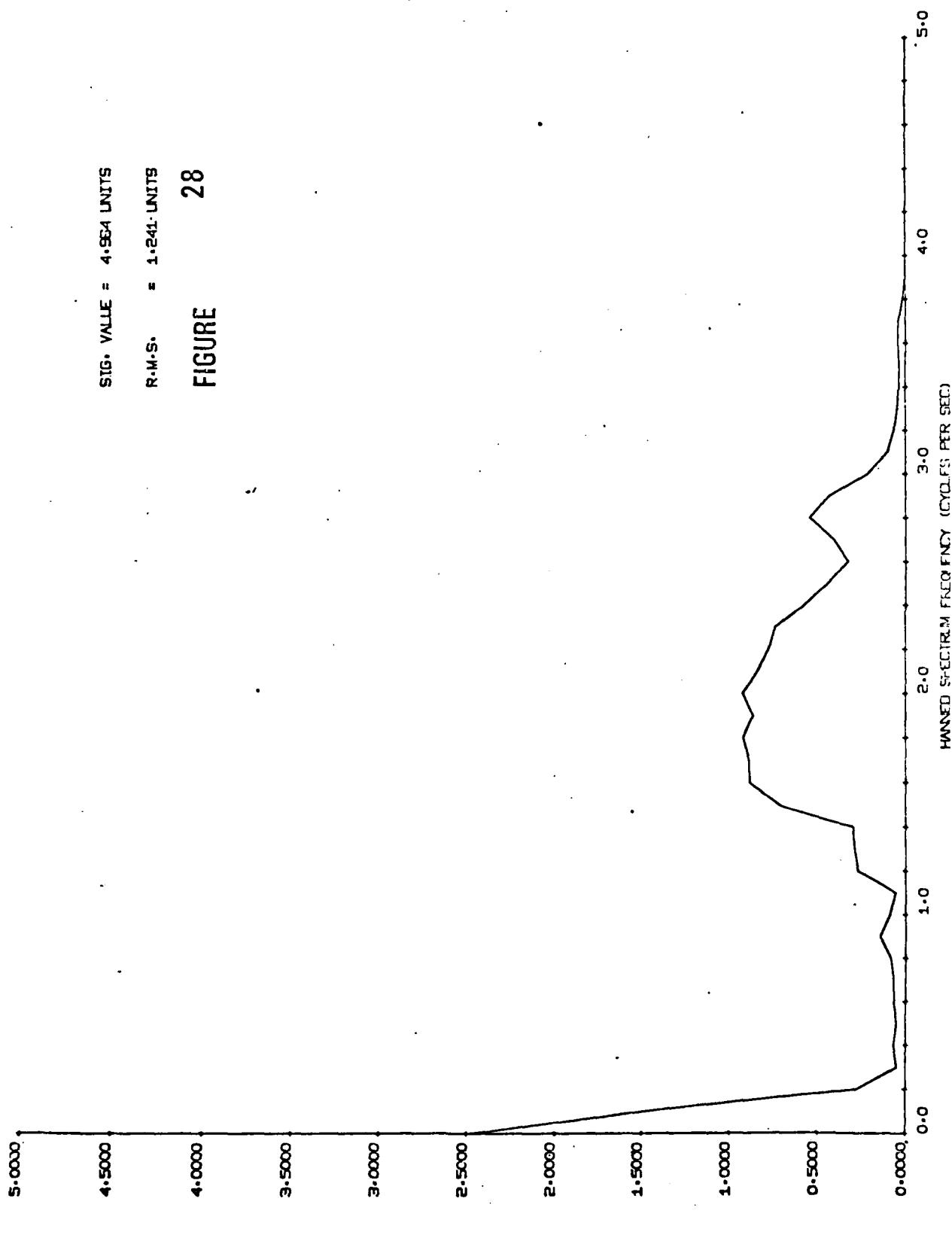


SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN B50 HEAVE SPECTRUM UNITS CENTIMETRES

SIG. VALUE = 4.954 UNITS

R.M.S. = 1.241 UNITS

FIGURE  
28



SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN END VERT.G AT C.G. SPECTRUM UNITS G.S

SIG. VALUE = 1.220 UNITS

R.M.S. = 0.305 UNITS

FIGURE 29

SPECTRAL DENSITY (UNITS SD PER CYCLE PER SEC)

HANDED SPECTRAL FREQUENCY (CYCLES PER SEC)

5.0

4.0

3.0

2.0

1.0

0.0

0.1000

0.0900

0.0800

0.0700

0.0600

0.0500

0.0400

0.0300

0.0200

0.0100

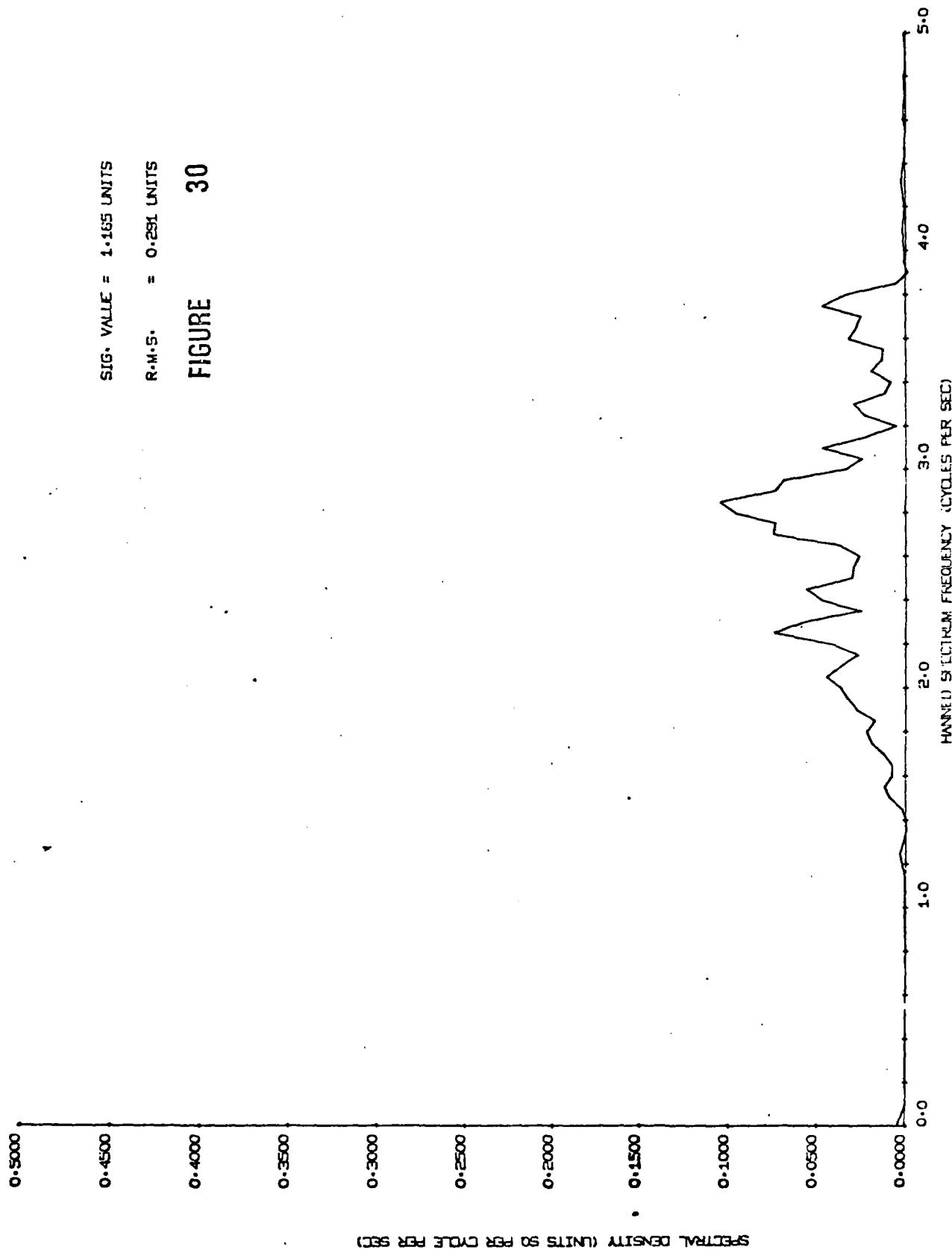
0.0000

SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN E50 VERT.G AT BOW SPECTRUM UNITS G.S

SIG. VALUE = 1.165 UNITS

R.M.S. = 0.291 UNITS

FIGURE 30

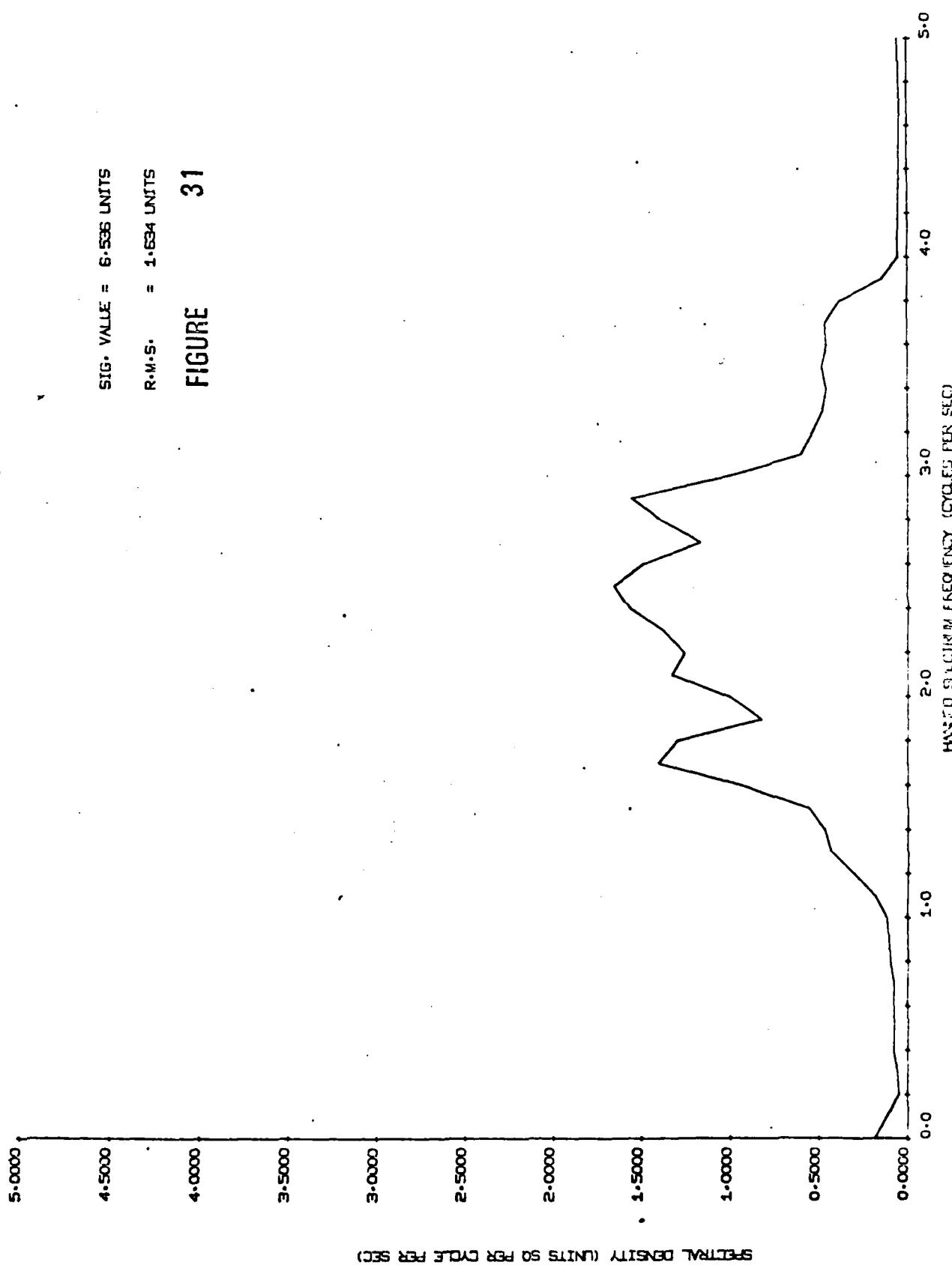


SEAKNIFE TESTS NO.1 S/T MAY '76 - RLN 880 ENCOUNTERED WAVE SPECTRUM UNITS CMS

SIG. VALUE = 6.536 UNITS

R.M.S. = 1.634 UNITS

FIGURE 31



SEAKNIFE TESTS NO.1 SAT MAY '76 - RUN 881 HEAVE SPECTRUM UNITS CENTIMETRES

5.0000

4.5000

4.0000

3.5000

3.0000

2.5000

2.0000

1.5000

1.0000

0.5000

0.0000

SPECTRAL DENSITY (UNITS SD PER CYCLE PER SEC)

SIG. VALUE = 5.351 UNITS

R.M.S. = 1.333 UNITS

FIGURE 32

HARVESTED SPECTRUM FREQUENCY (CYCLES PER SEC)

5.0

4.0

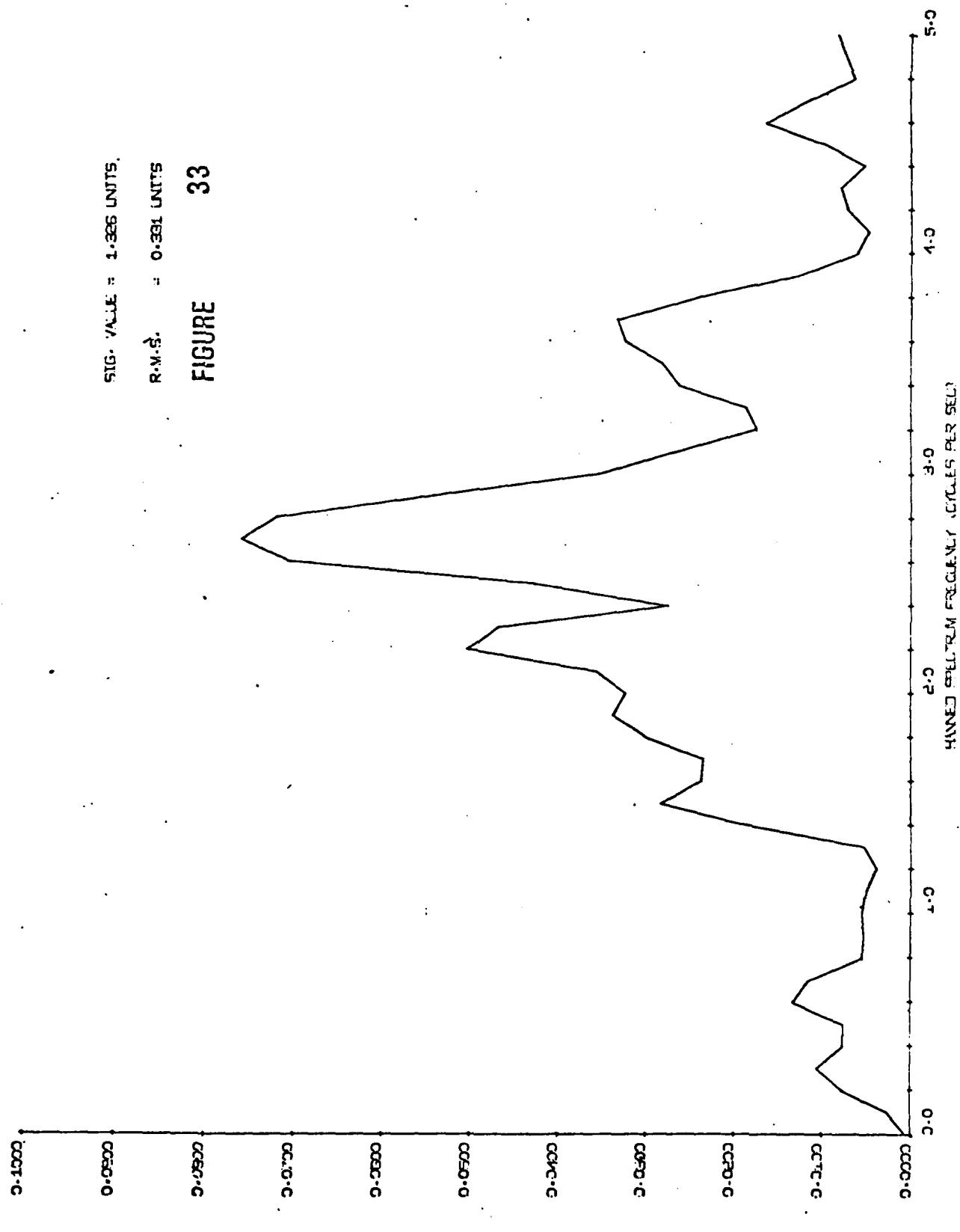
3.0

2.0

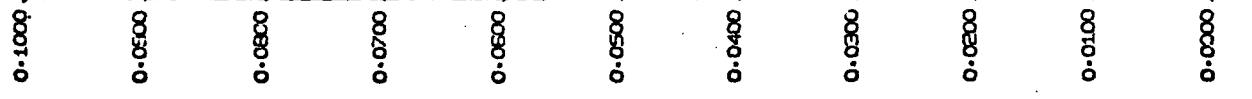
1.0

0.0

SEAKNIFE TESTS NO.1 SAT MAY '76 - RLN 591 VERT.G AT C.G. SPECTRUM UNITS 6.5



SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN 891 VERT.G AT BOW SPECTRUM UNITS G.S



SIG. VALUE = 1.206 UNITS  
R.M.S. = 0.301 UNITS

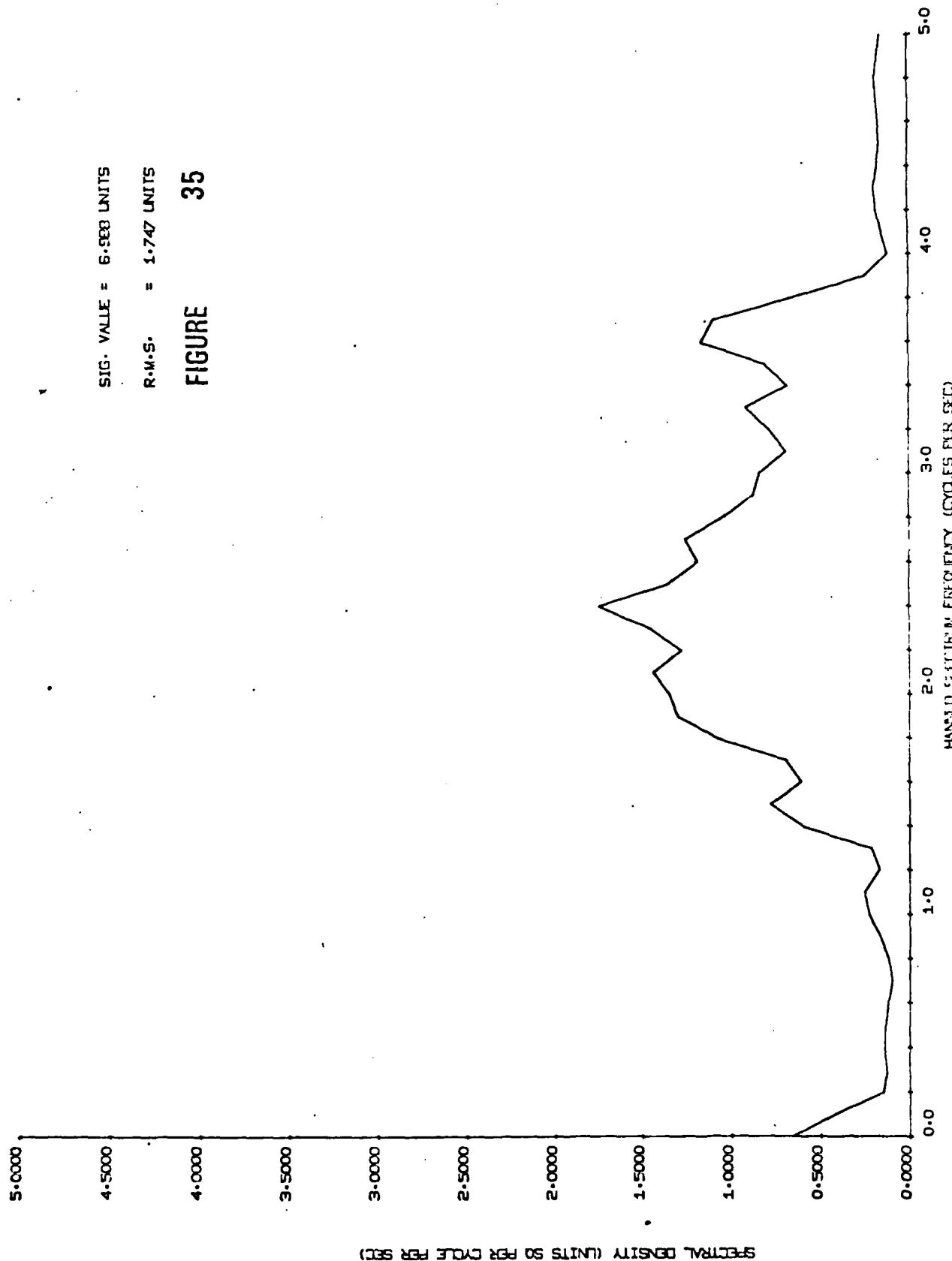
FIGURE 34

SEAKNIFE TESTS NO.1 SAT MAY '76 - RUN 831 ENCOUNTERED WAVE SPECTRUM UNITS CMS

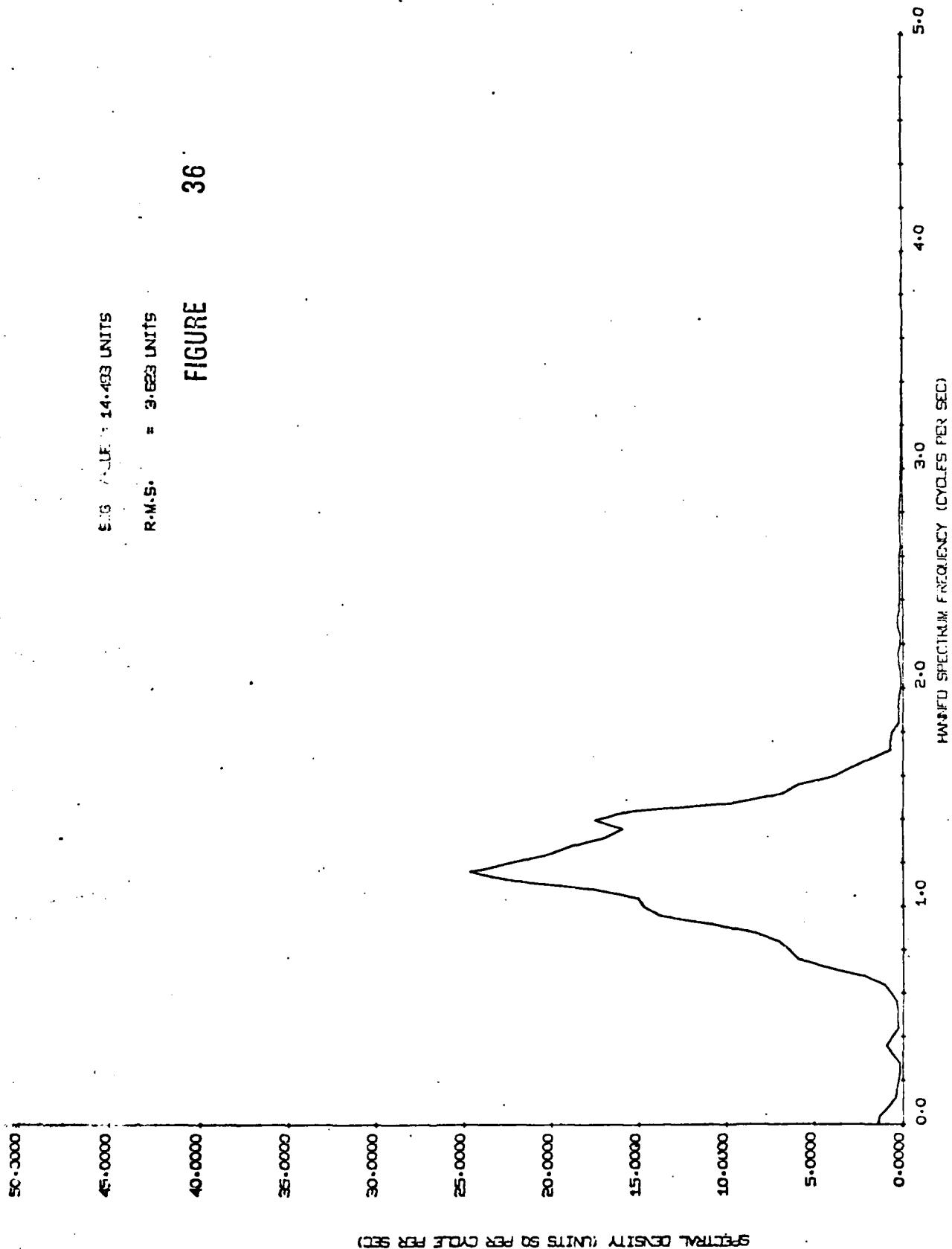
SIG. VALUE = 6.523 UNITS

R.M.S. = 1.747 UNITS

FIGURE  
35



55-4977 TRACES NO. 11 MAY '7 - RUN EST. 100000 SPECTRUM AT 10 DEGREES

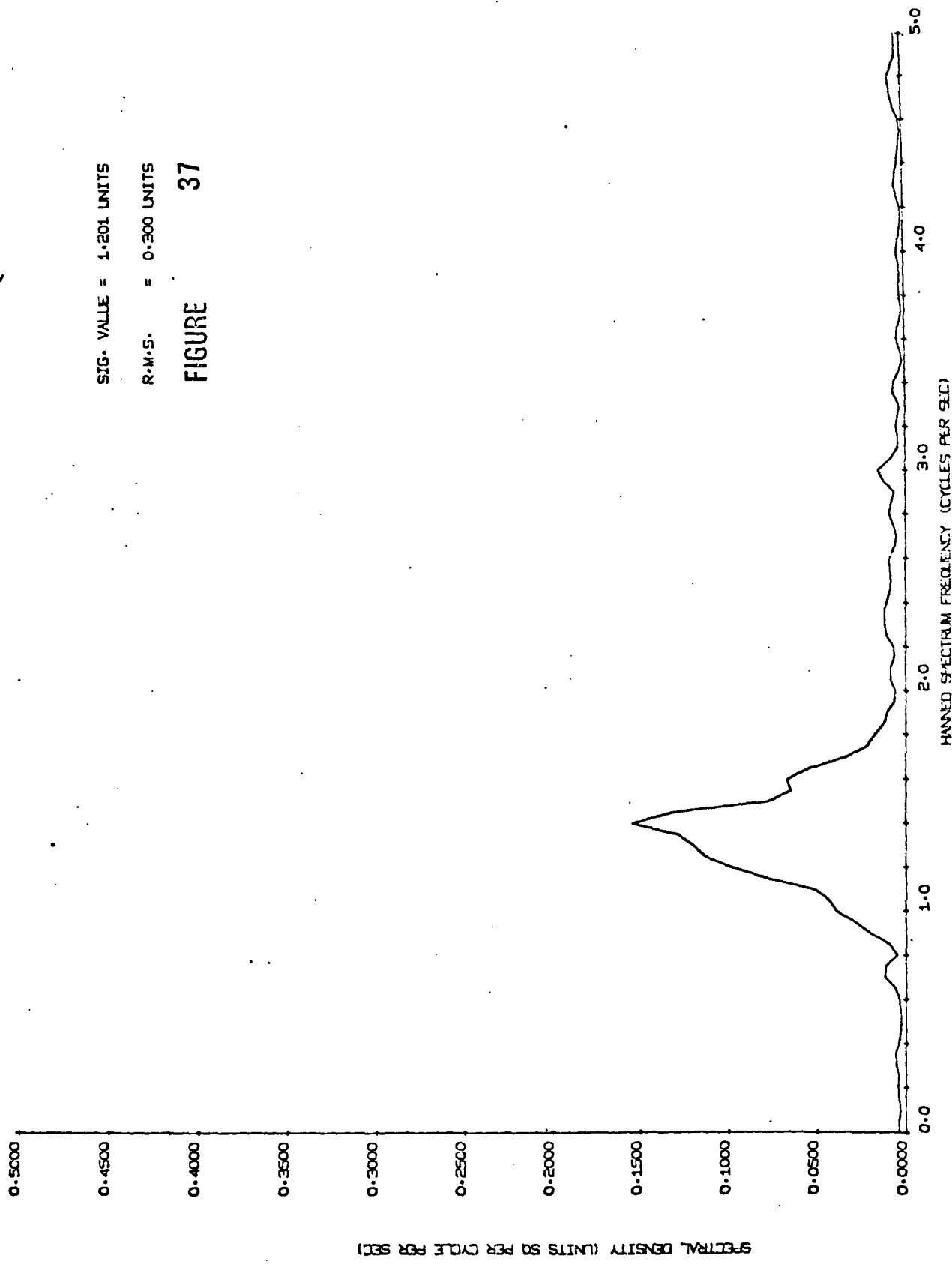


SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN 683 VERT.G AT C.G. SPECTRUM UNITS G.S

SIG. VALUE = 1.201 UNITS

R.M.S. = 0.300 UNITS

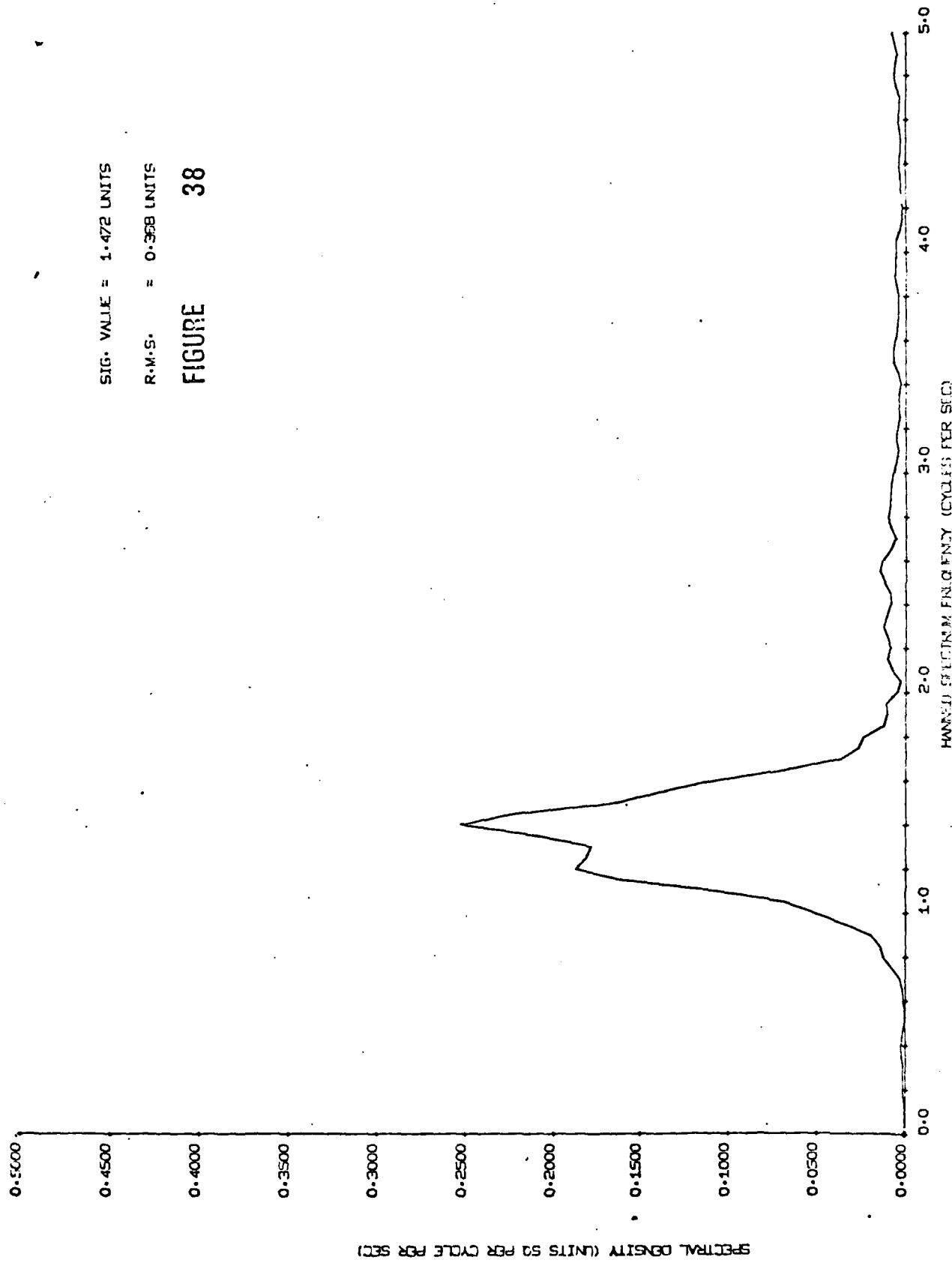
FIGURE  
37



SEAKNIFE TESTS NO.1 SAT MAY '76 - RUN 803 VERT.G AT DOW SPECTRUM UNITS G.S

SIG. VALUE = 1.472 UNITS  
R.M.S. = 0.358 UNITS

FIGURE 38



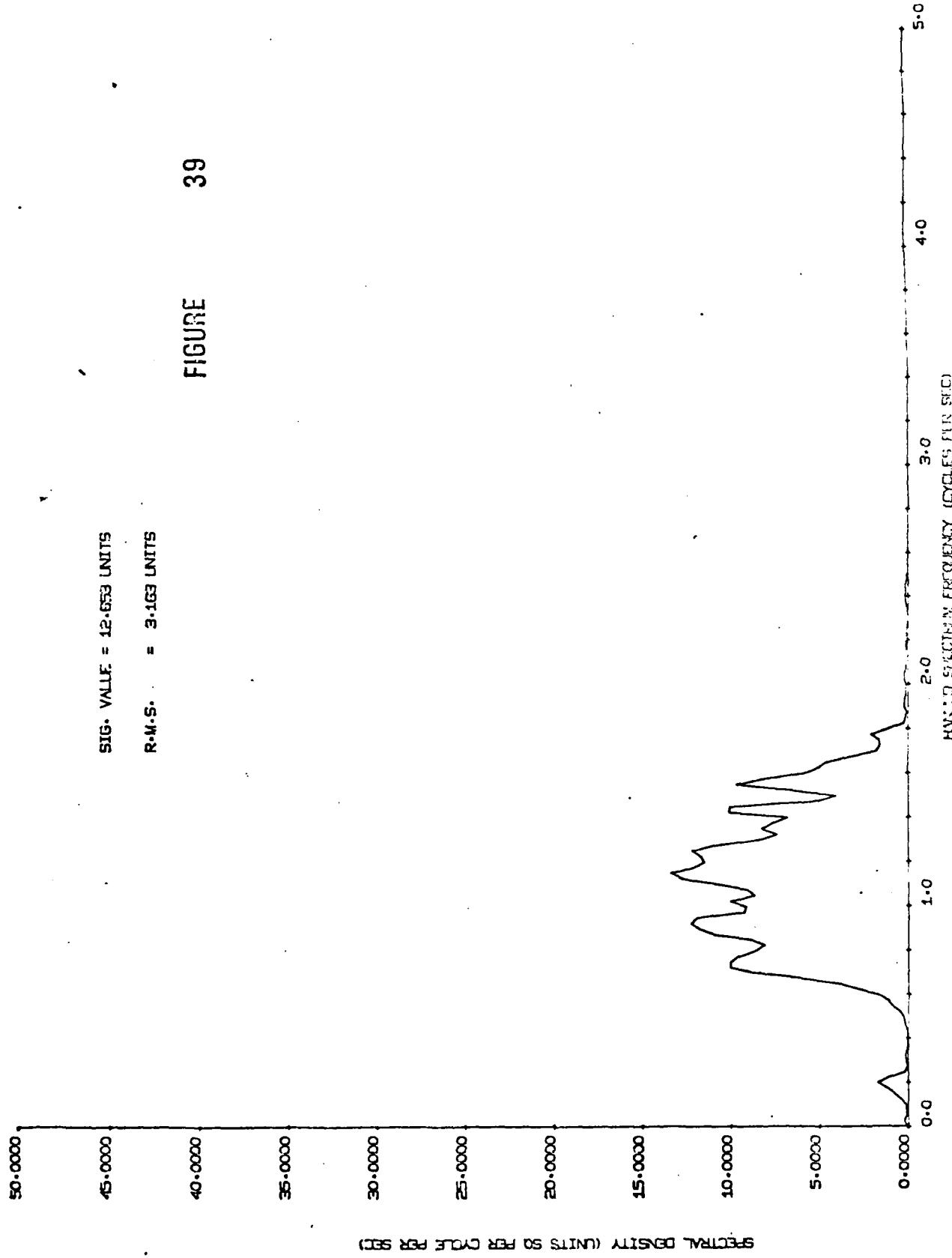
SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN 893 ENCOUNTERED WAVE SPECTRUM UNITS CMS

SIG. VALUE = 12.653 UNITS

R.M.S. = 3.163 UNITS

FIGURE

39



SEGMENT TESTS NO. 1 & NO. 76 . . . RAN 500 FEET PER TESTM UNITS 50 FEET

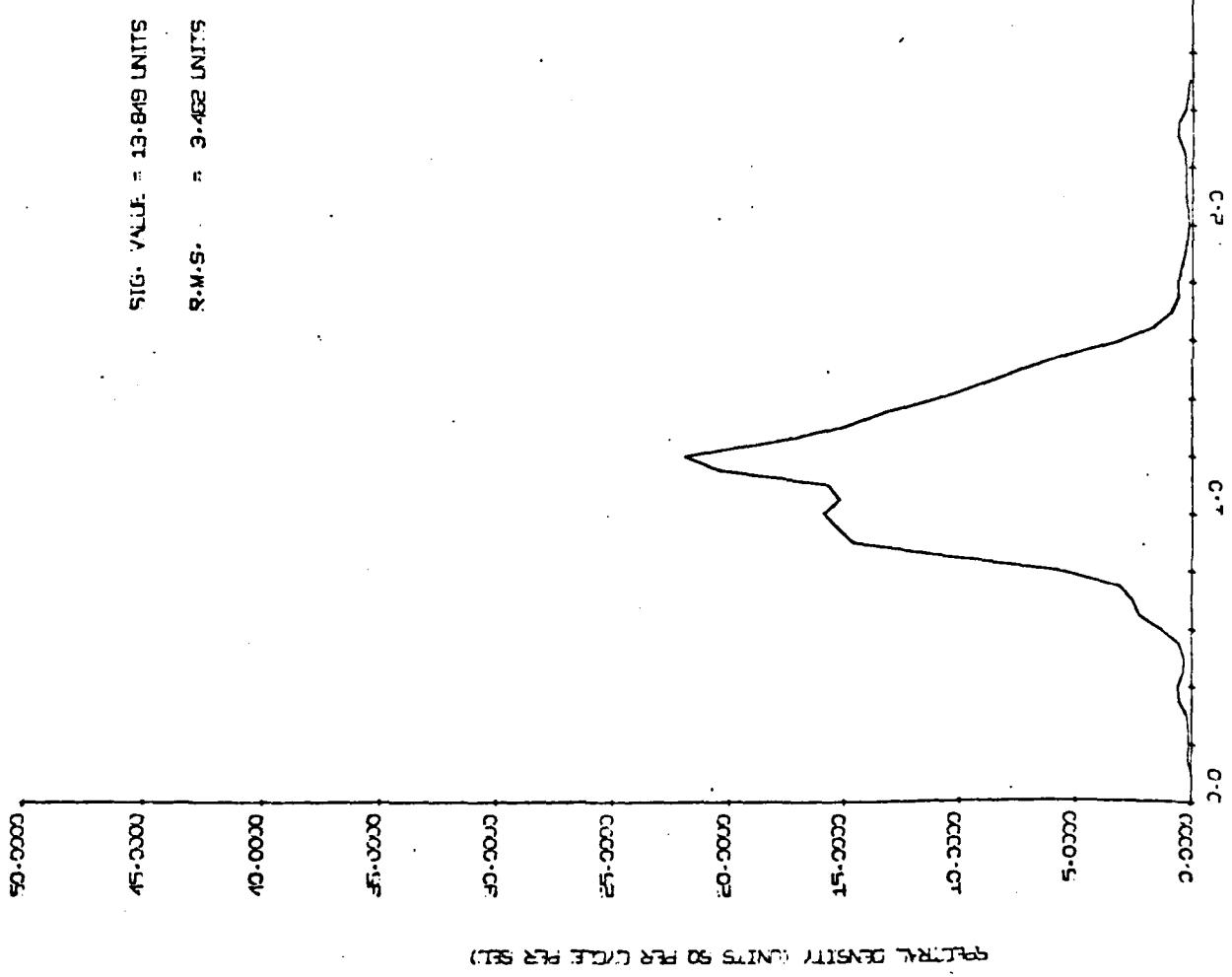
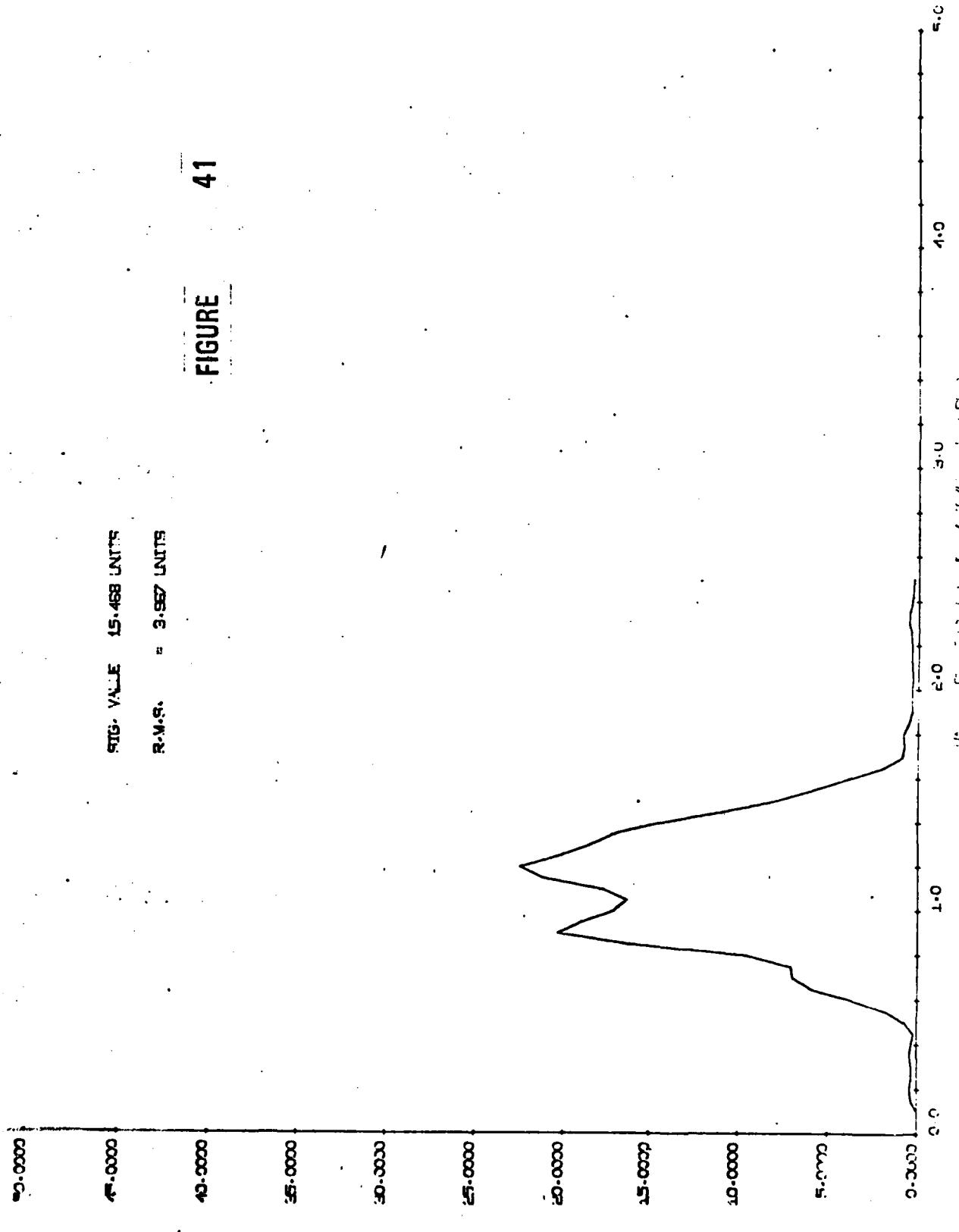


FIGURE 40

EXPERIMENTAL TESTS NO. 1 S/N MAY 195 - RUN 59 - LEAVE SPECTRAL METER CENTIMETRES

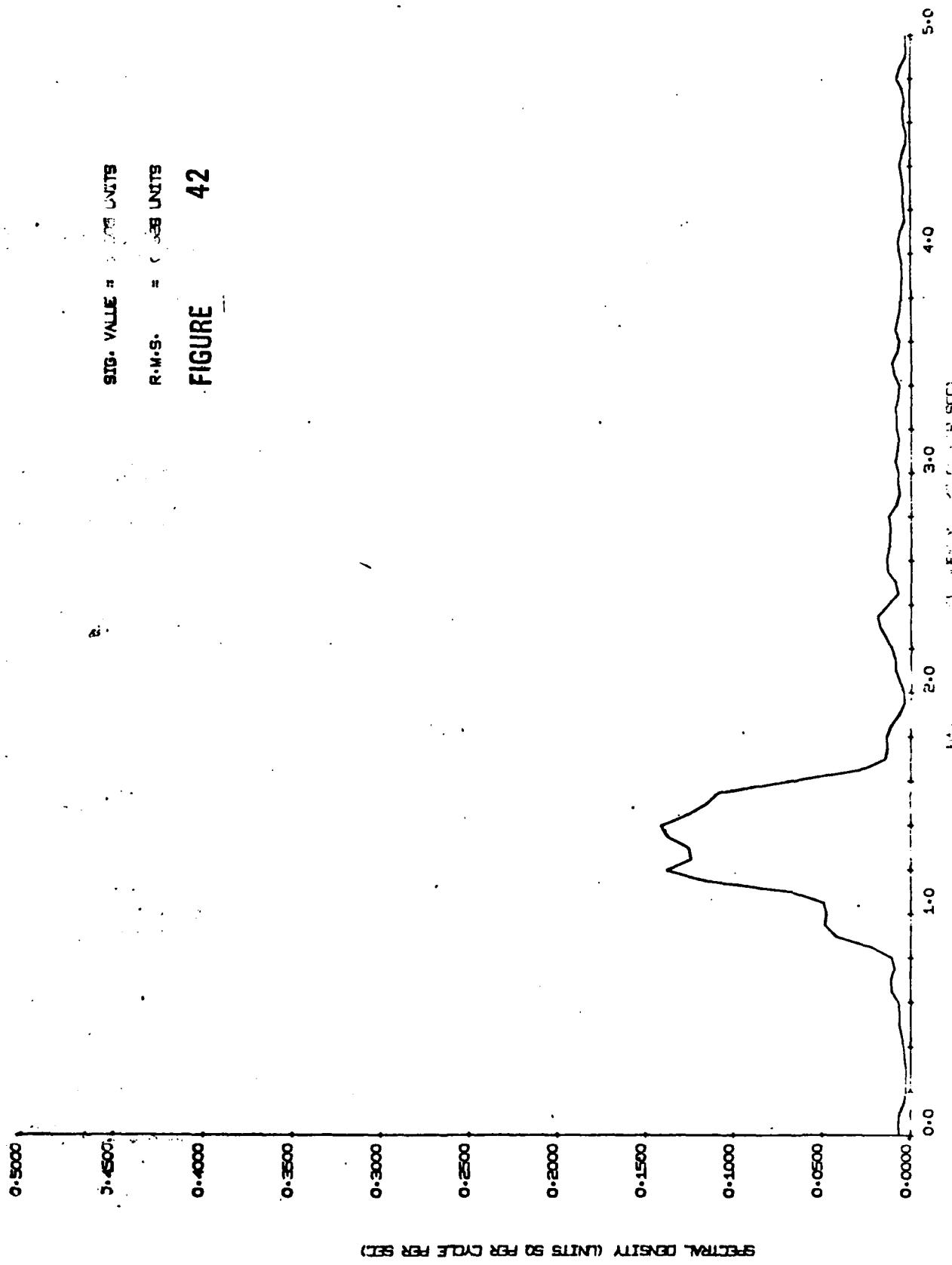


SEANNITE TESTS NO. 1 S-1 MAY 1973 - RUN 8E4 VERTIG AT C.G. SPECTRUM UNITS G.S.

SIG. VALUE = 1.00 UNITS

R.M.S. = 0.38 UNITS

FIGURE  
42



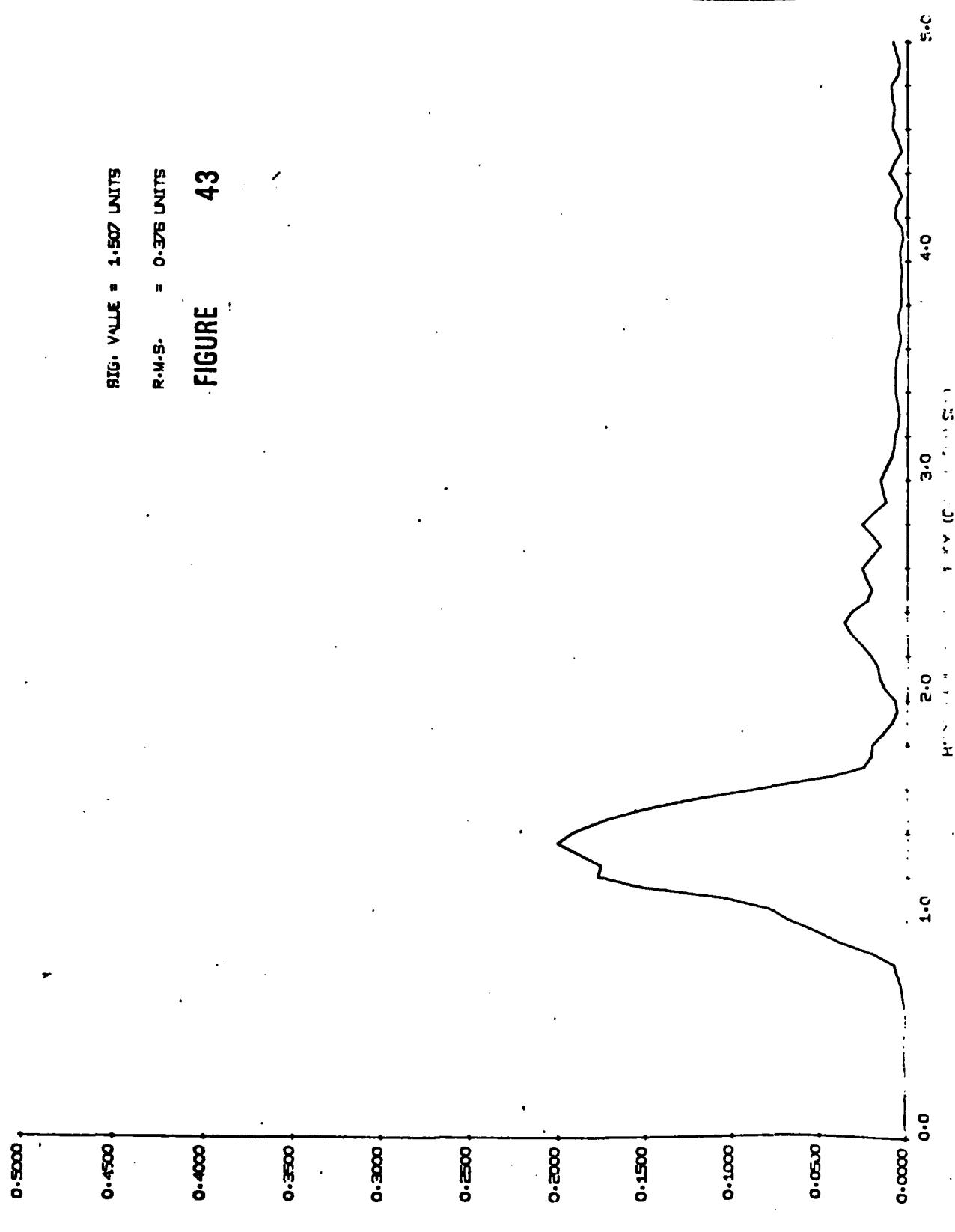
SPECTRAL DENSITY (UNITS GS PER CYCLE PER SEC)

SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN 894 VERT.G AT BOW SPECTRUM UNITS G.S

SIG. VALUE = 1.507 UNITS

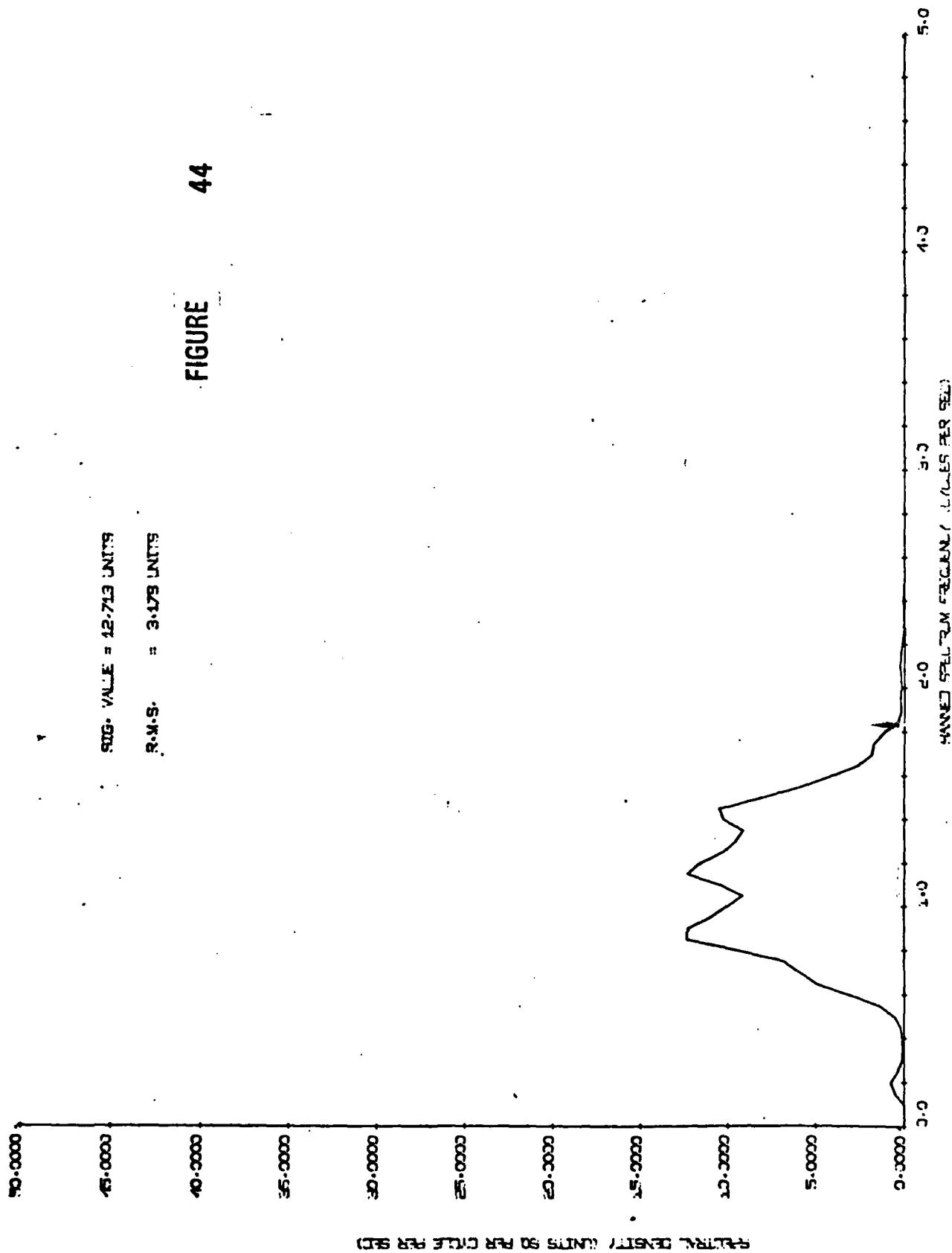
R.M.S. = 0.376 UNITS

FIGURE 43



SPECTRAL DENSITY (UNITS G PER CYCLE PER SEC)

SEAKITE TESTS NO. 1-5 T MAY '76 - SUN 884 ENCLOSED WAVE SPECTRUM UNITS UWS

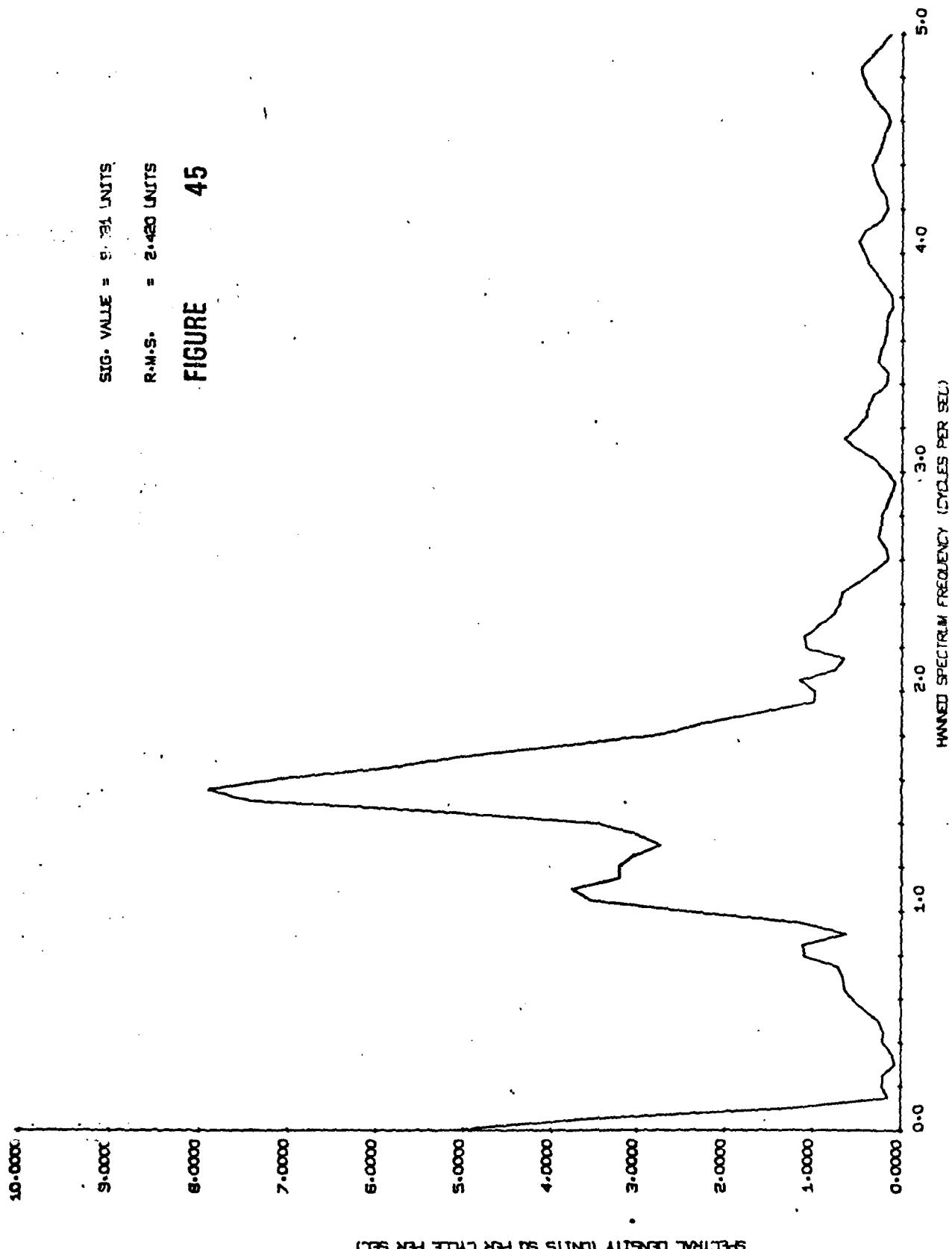


PIKEKNIFE TESTS NO. 1 5TH MAY '76 - RUN 866 PITCH SPECTRUM UNITS DEGREES

SIG. VALUE = 8.731 UNITS

R.M.S. = 2.420 UNITS

FIGURE  
45

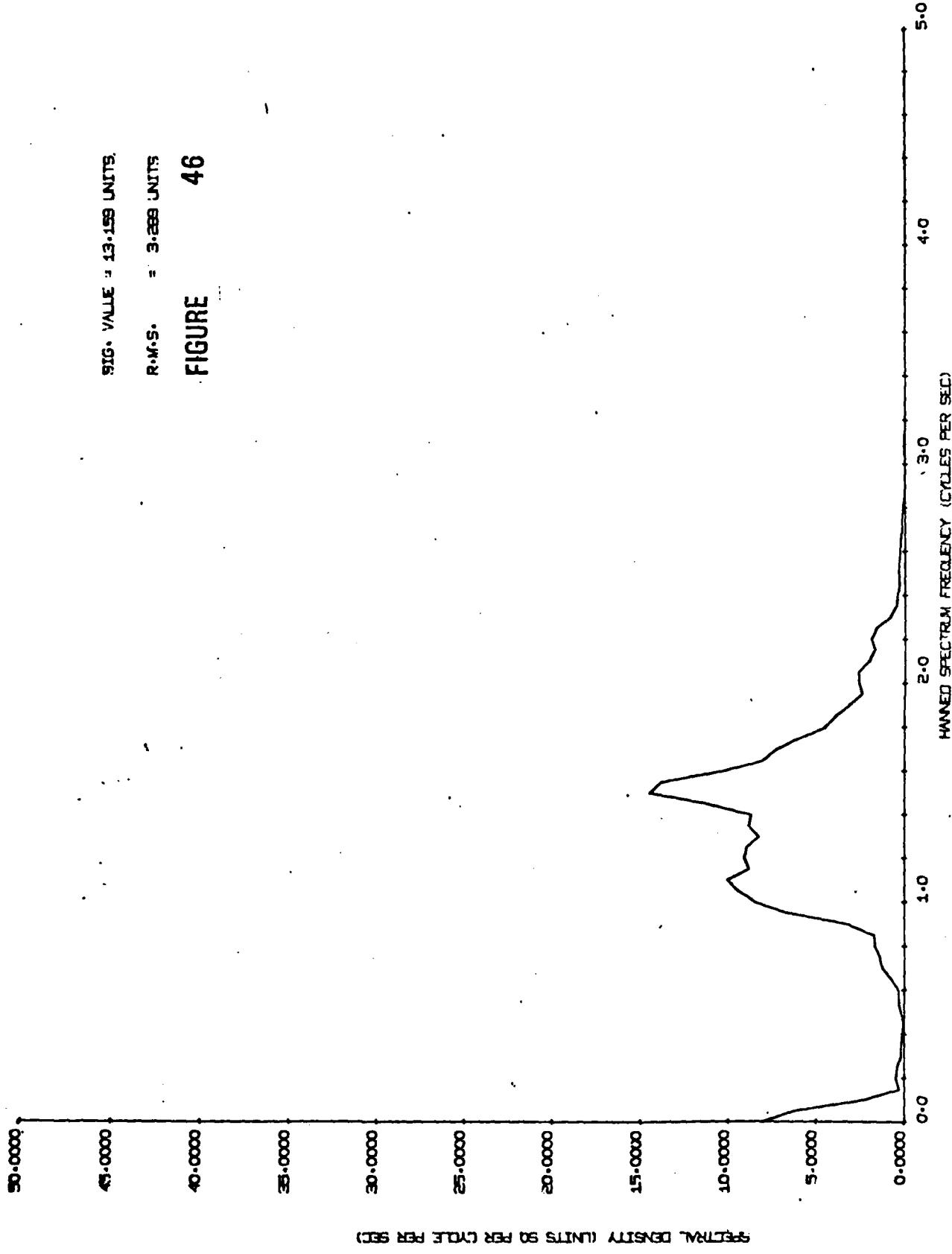


SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN 885 HEAVE SPECTRUM UNITS CENTIMETRES

SIG. VALUE = 13.159 UNITS.

R.M.S. = 3.288 UNITS

FIGURE  
46



SENSEIF TESTS NO 1 SAT MAY 17E - RUN BBS VERT.5 AT C.C. SPECTRUM UNITS G.S.

0.5000

0.4500

0.4000

0.3500

0.3000

0.2500

0.2000

0.1500

0.1000

0.0500

0.0000

SPECTRAL DENSITY (UNITS SD PER CYCLE PER SEC)

SIG. VALUE = 1.15 UNITS

R.M.S. = 0.423 UNITS

FIGURE 47

HANNED SPECTRUM FREQUENCY (CYCLES PER SEC)

5.0

3.0

1.0

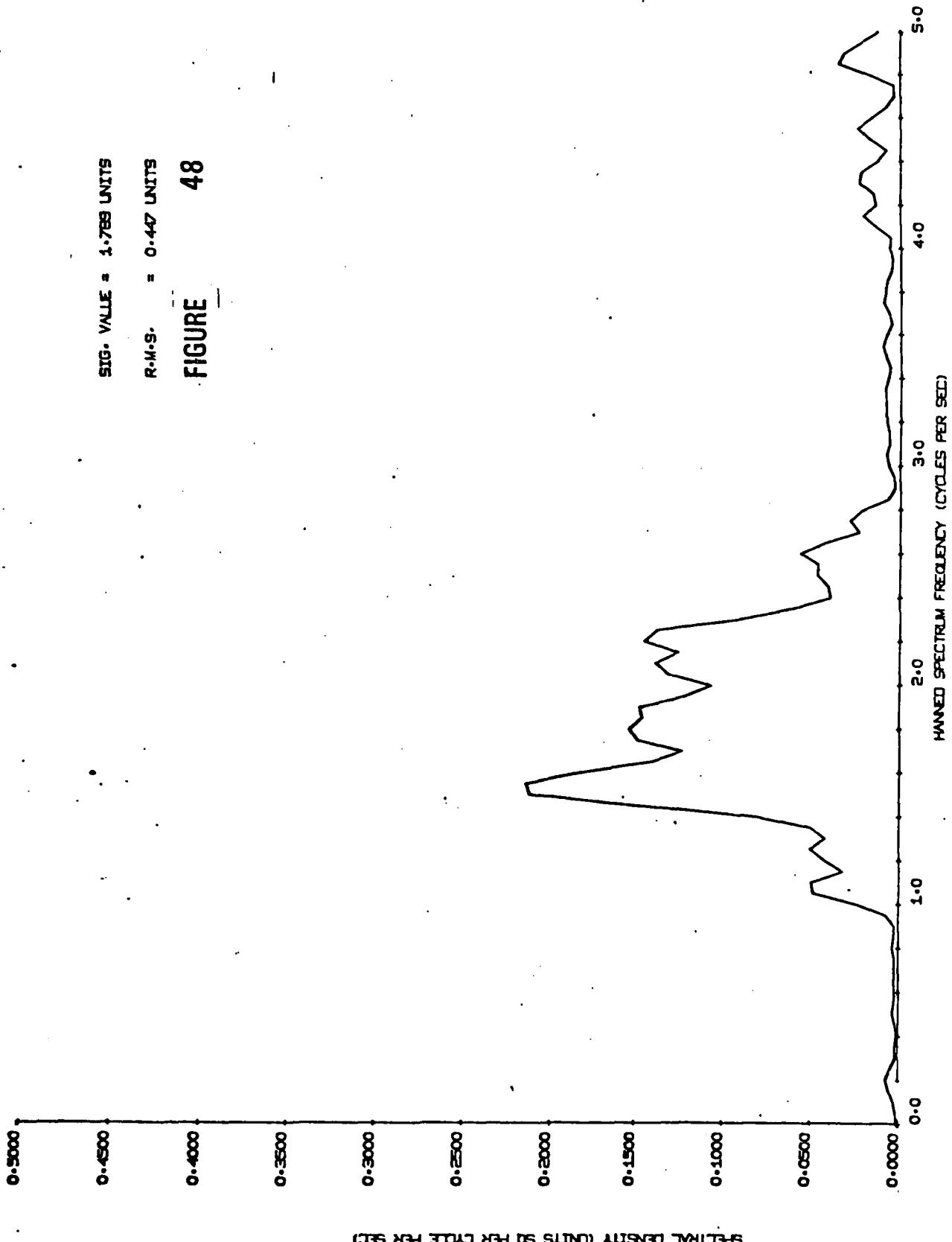
4.0

SEAKNIFE TESTS NO.1 BT MAY '76 - RLN 686 VERT.G AT BOW SPECTRUM UNITS G.S

SIG. VALUE = 1.788 UNITS

R.M.S. = 0.447 UNITS

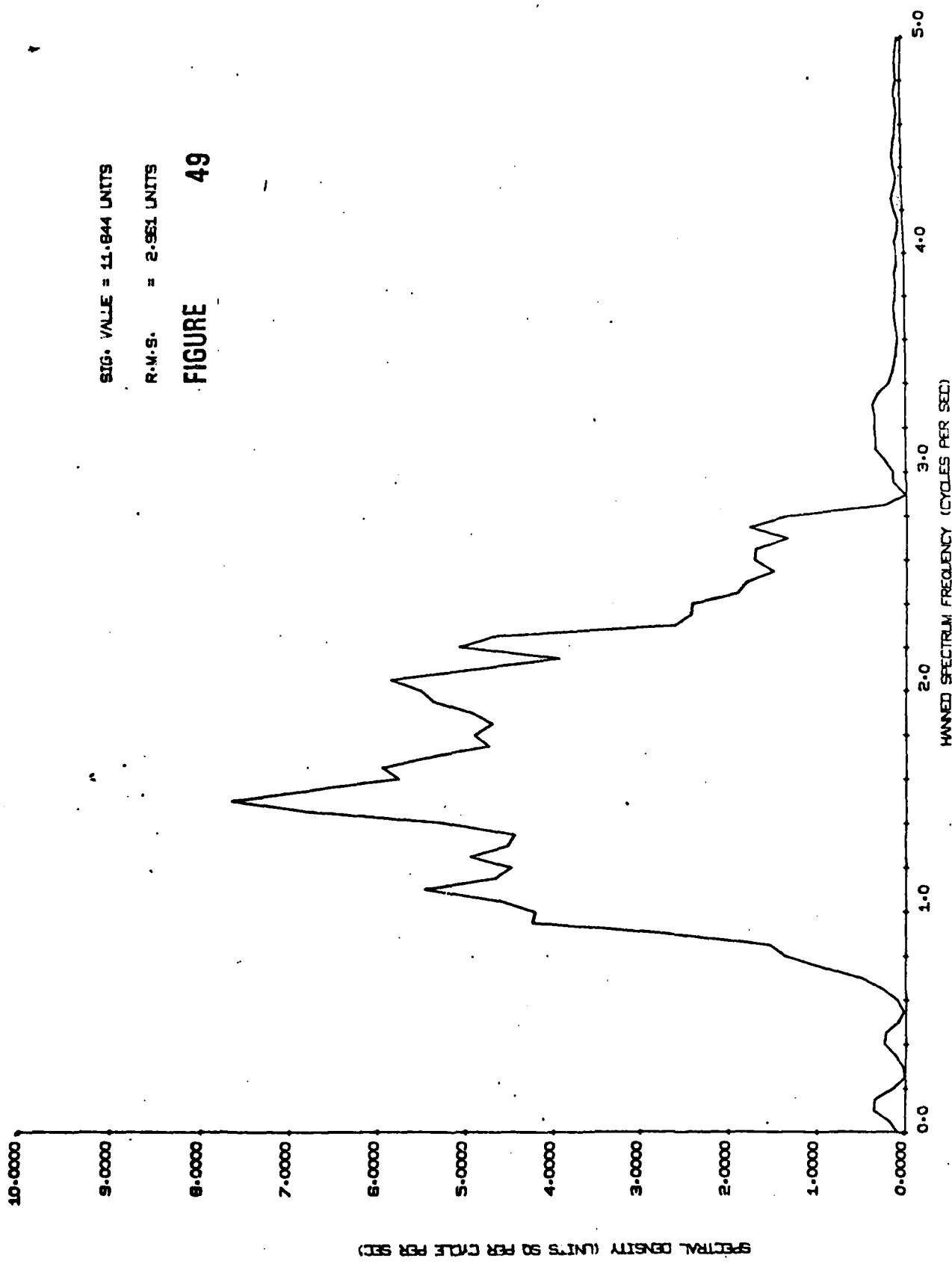
FIGURE 48



SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN 996 ENCOUNTERED WAVE SPECTRUM UNITS CMS

SIG. VALUE = 11.844 UNITS  
R.M.S. = 2.951 UNITS

FIGURE 49



SEAWIFFE TESTS NO.1 SAT MAY '76 - RUN 887 PITCH SPECTRUM UNITS DEGREES

10.0000

9.0000

8.0000

7.0000

6.0000

5.0000

4.0000

3.0000

2.0000

1.0000

0.0000

SPECTRAL DENSITY (UNITS SQ PER CYCLE PER SEC)

SIG. VALUE = 7.251 UNITS.

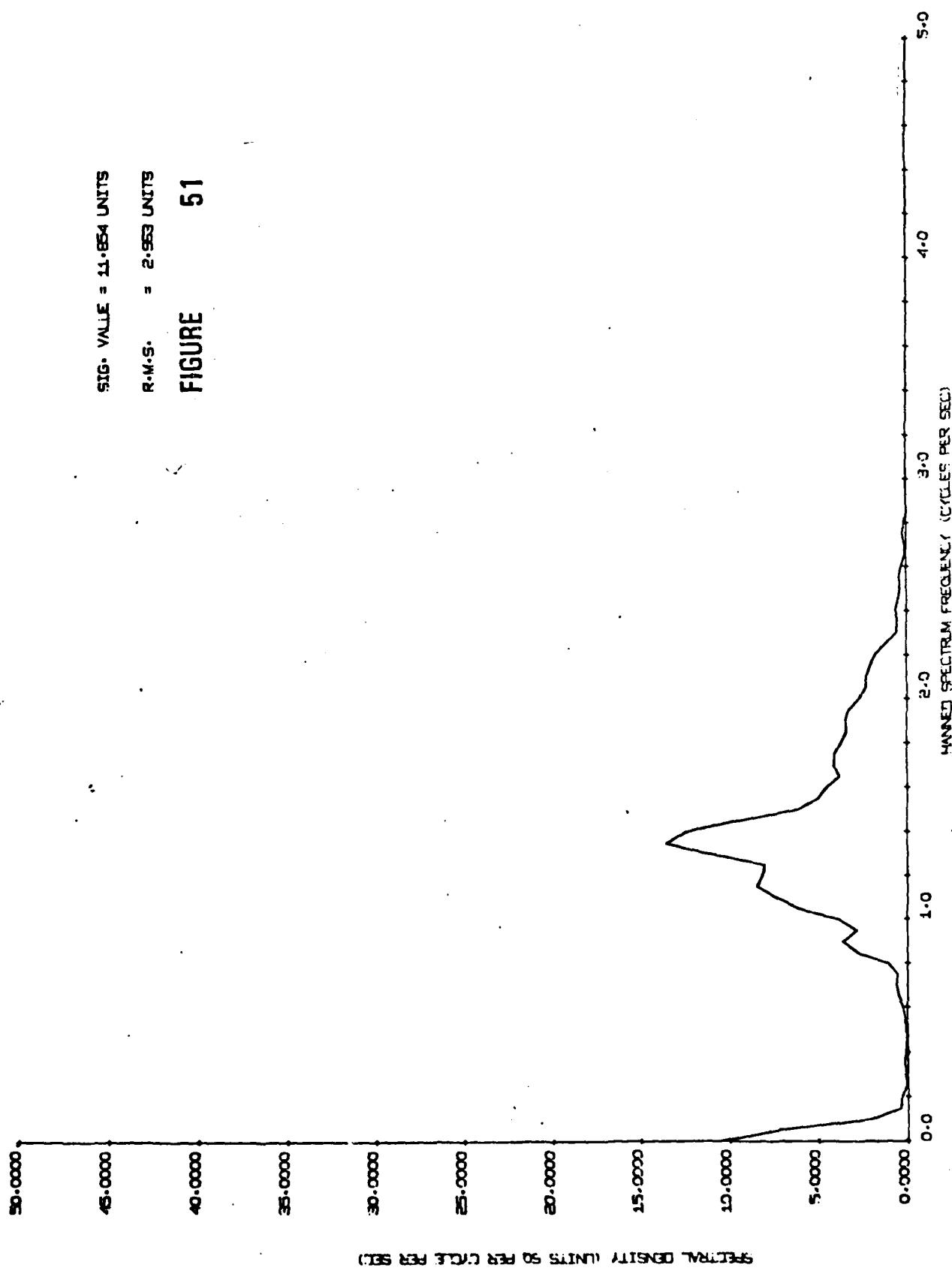
R.M.S. = 1.842 UNITS

FIGURE  
50

5.0  
4.0  
3.0  
2.0  
1.0  
0.0

HANDED SPECTRUM FREQUENCY (CYCLES PER SEC)

SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN 887 HEAVE SPECTRUM UNITS CENTIMETRES

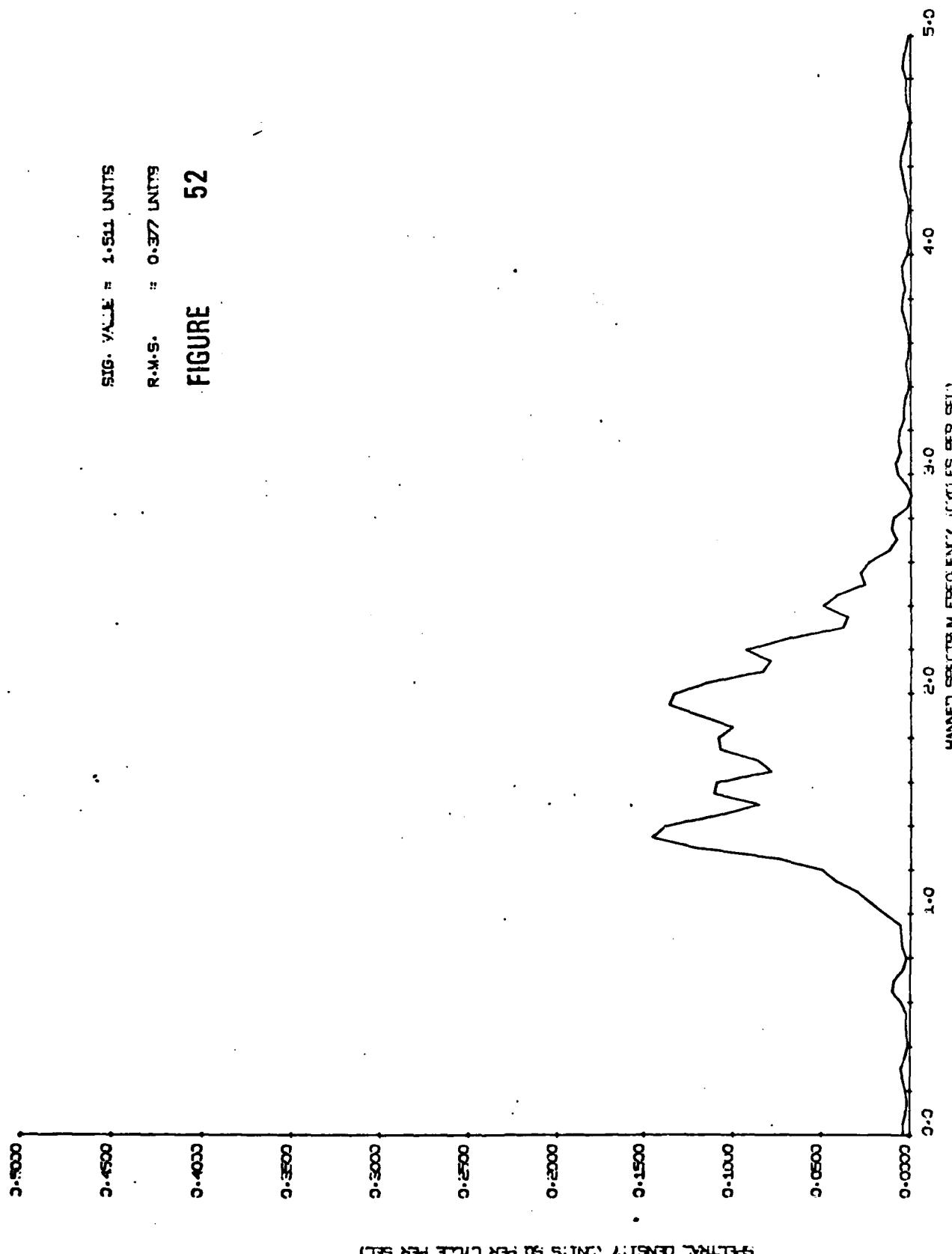


SEAKNIFE TESTS NO.1 SAT MAY '76 - RUN 997 VERT.G AT C.G. SPECTRUM UNITS G.S

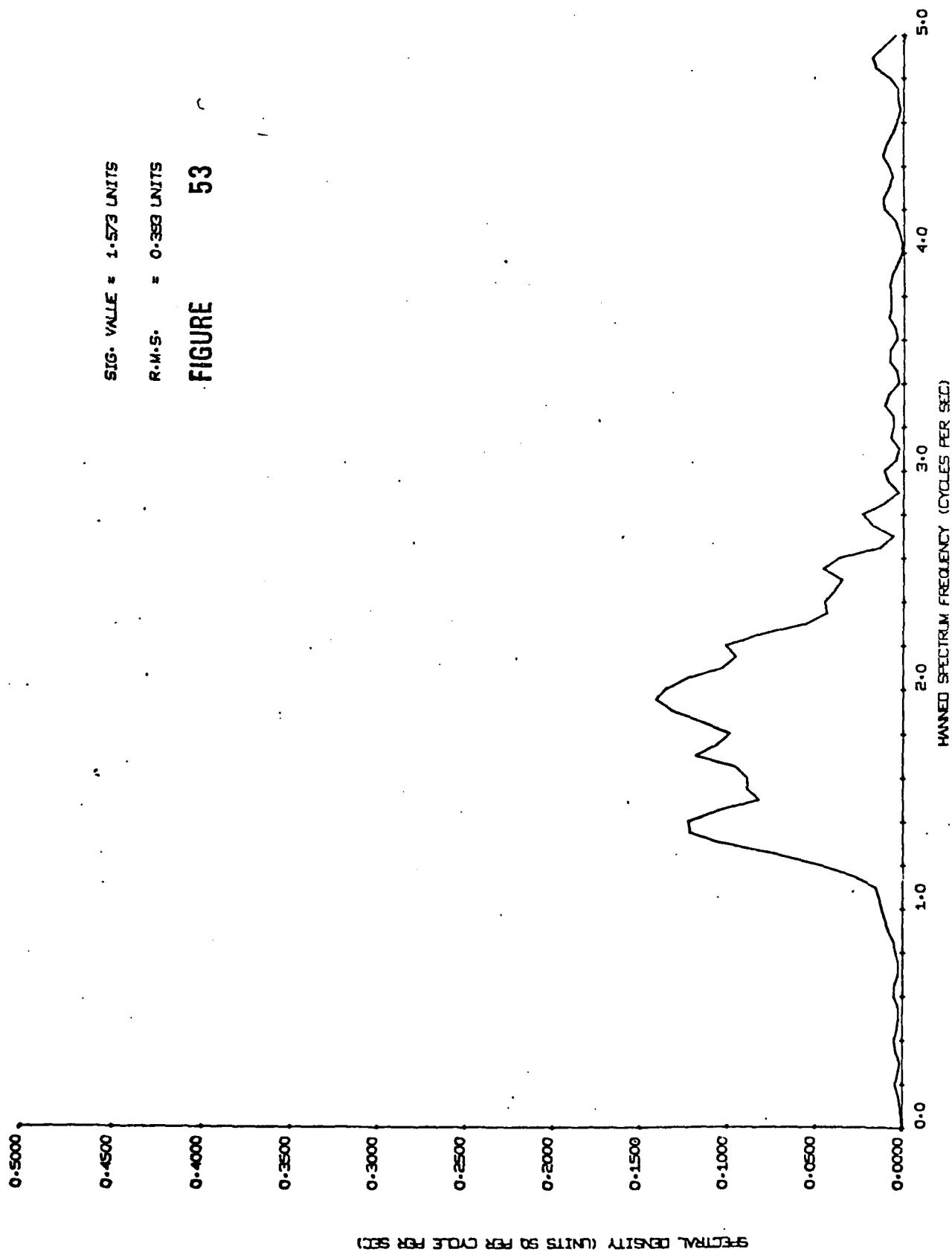
SIG. VALUE = 1.511 UNITS

R.M.S. = 0.377 UNITS

FIGURE  
52



SEAWAYTE TESTS NO.1 S/T MAY '76 - RUN 697 VERT.G AT 80W SPECTRUM UNITS G.S

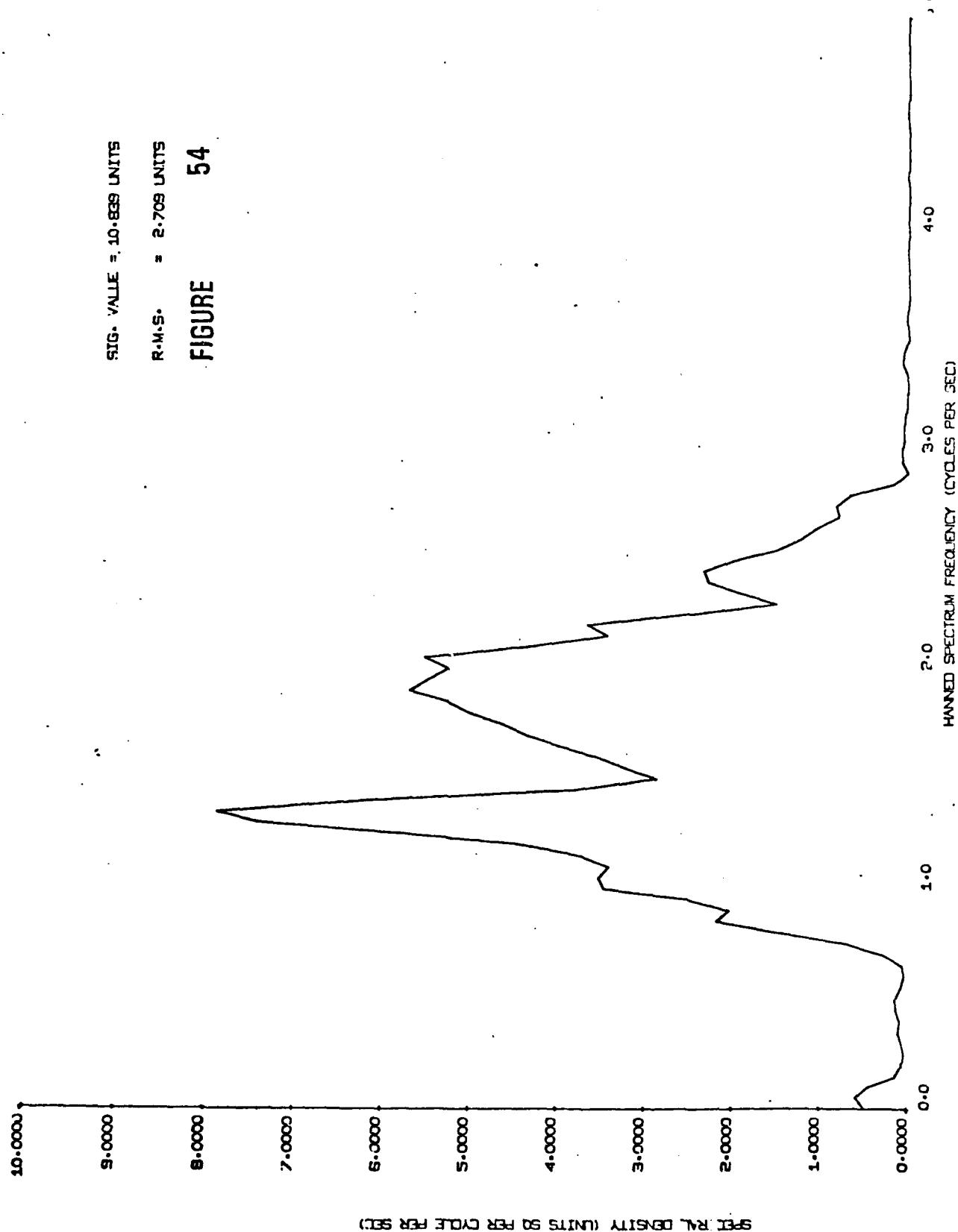


SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN 697 ENCOUNTERED WAVE SPECTRUM UNITS CMS

SIG. VALUE = 10.839 UNITS

R.M.S. = 2.709 UNITS

FIGURE 54



SEVENITE TESTS NO. 1 BY MAY 173 - R.N. 998 PITCH SPECTRUM

1

5.000

40.000

35.000

30.000

25.000

20.000

15.000

10.000

5.000

0.000

SPECTRAL DENSITY (UNITS OF PER CYCLE PER SEC)

SIG. VALUE = 7.57 UNITS

R.M.S. = 1.23 UNITS

FIGURE  
55

HANNED SPECTRUM FREQUENCY (CYCLES PER SEC)

5.0

4.0

3.0

2.0

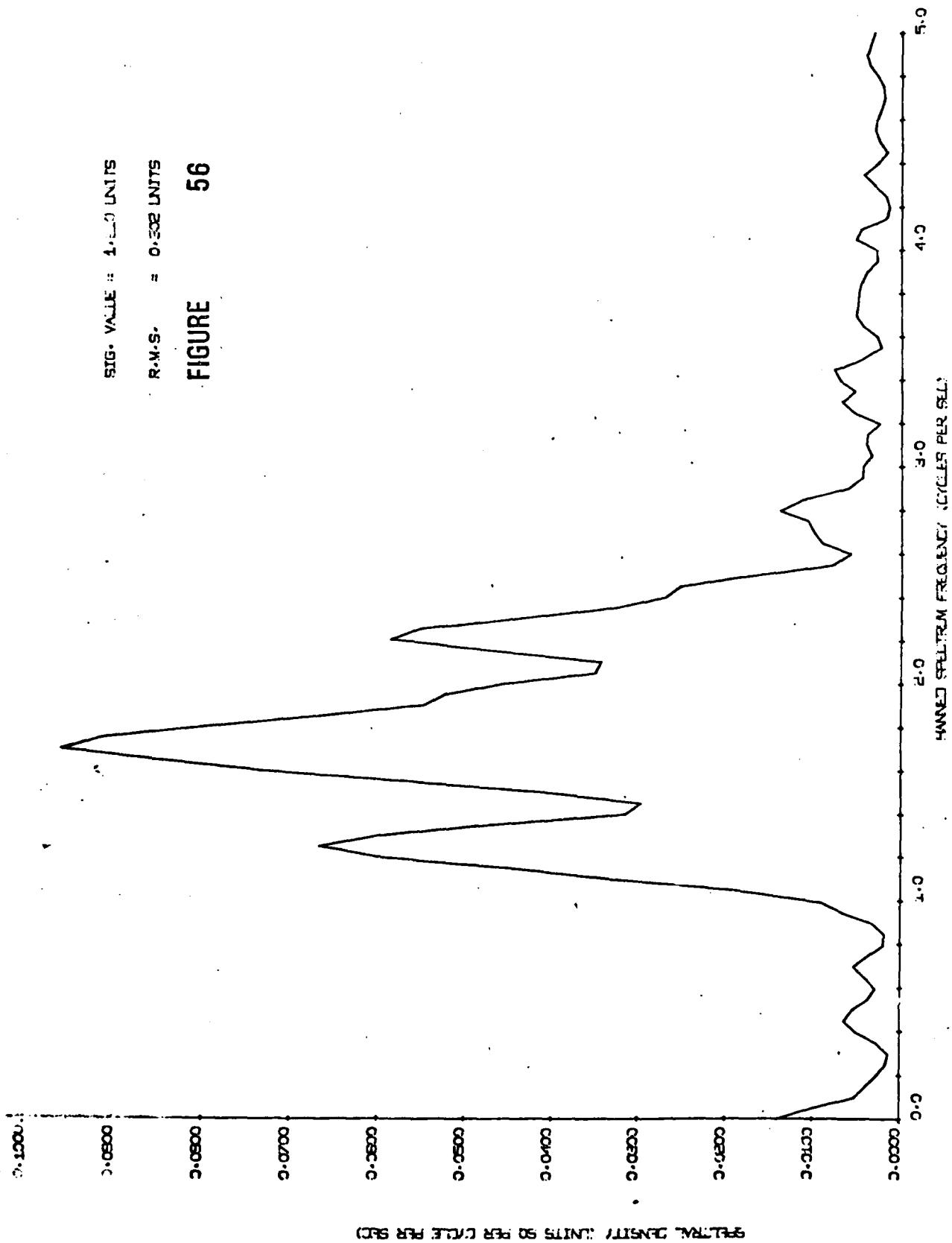
1.0

0.0

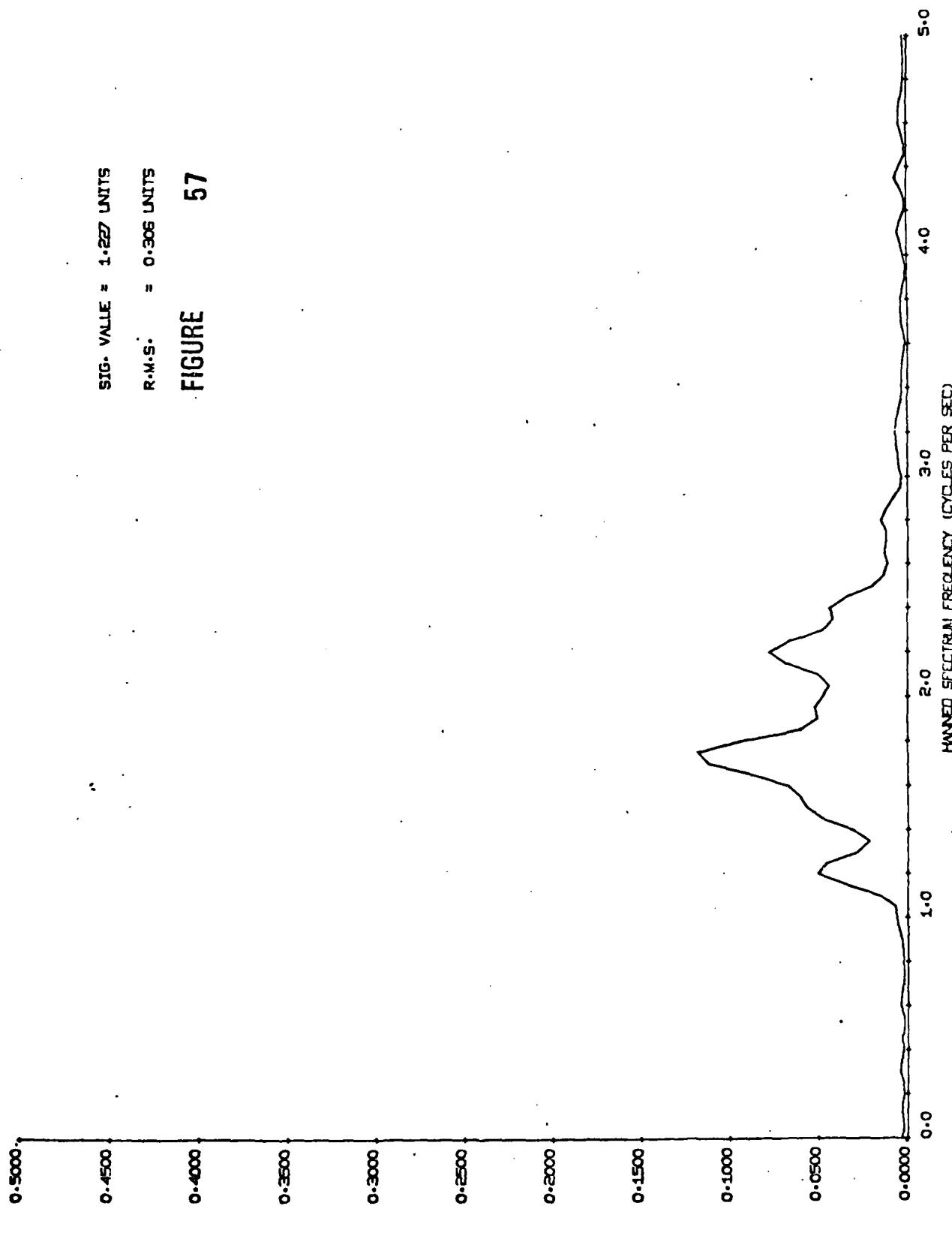
SEPARATE TESTS NO. 1 SAT MAY '78 - RUN 388 VER. 3 AT C.B. SPECTRUM UNITS G.S

SIG. VALUE = 1.00 UNITS  
R.M.S. = 0.302 UNITS

FIGURE 56



SEAKNIFE TESTS NO.1 SAT MAY '76 - RUN 898 VERT.G AT BOW SPECTRUM UNITS G.S

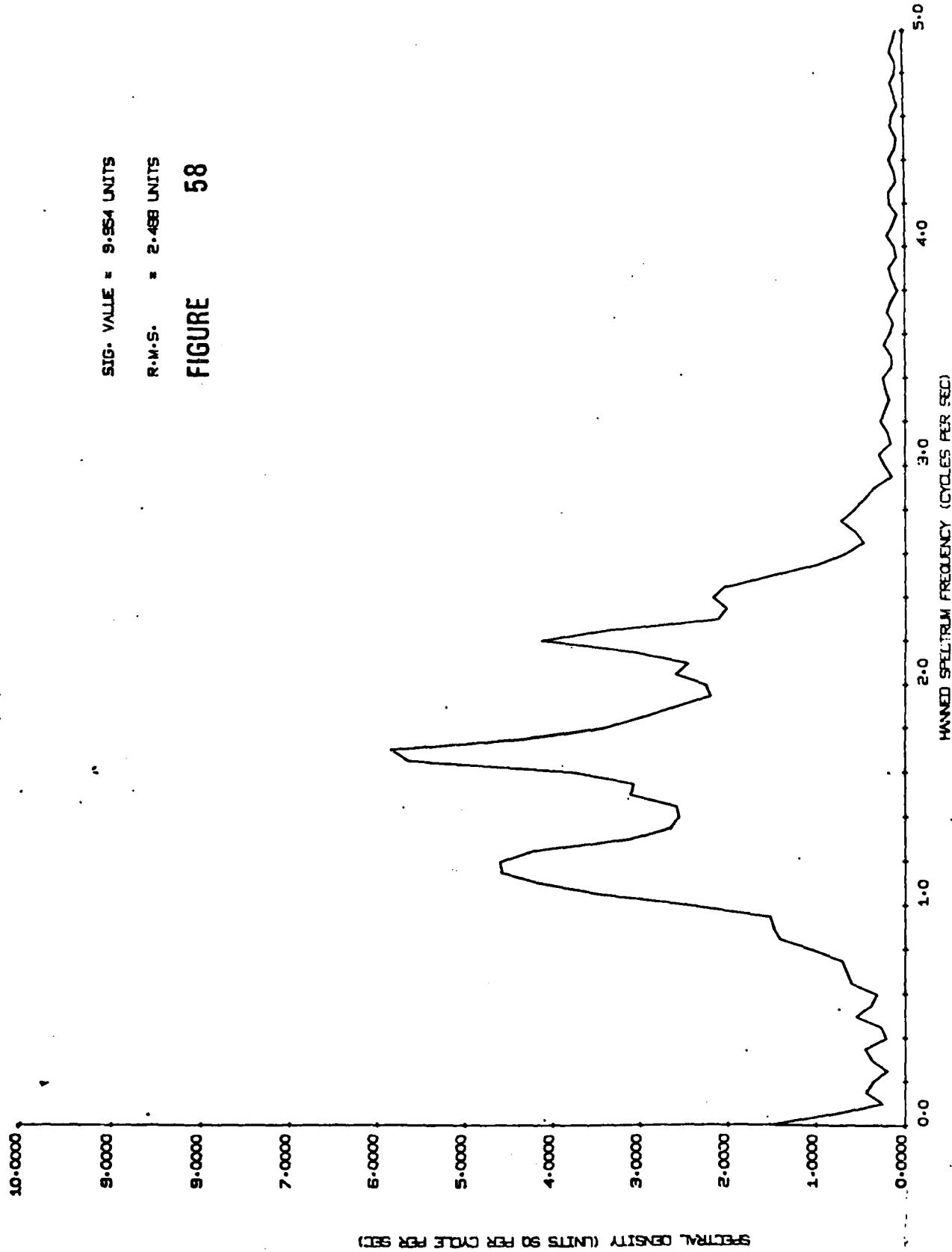


SEAKNIFE TESTS ND-1 S/T MAY 76 - RUN 898 ENCOUNTERED WAVE SPECTRUM UNITS OWS

SIG. VALUE = 9.554 UNITS

R.M.S. = 2.488 UNITS

FIGURE 58

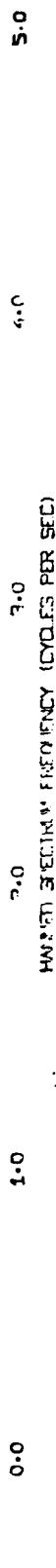


BLADE TESTS NO. 5 MAY 175 - RUN BBB PITCH SPECTRUM IN DEGREES

SIG. VALUE = 7.924 UNITS  
R.M.S. = 1.981 UNITS

FIGURE 59

SPECTRAL DENSITY (UNITS AS PWR CYCLE PER SEC)



SEASCAPE TESTS NO. 1 SET MAY 17 - RUN 889 VER. 3 AT C.G. SFT STRM UNITS G.S

0.3000

0.2500

0.2000

0.1500

0.1000

0.0500

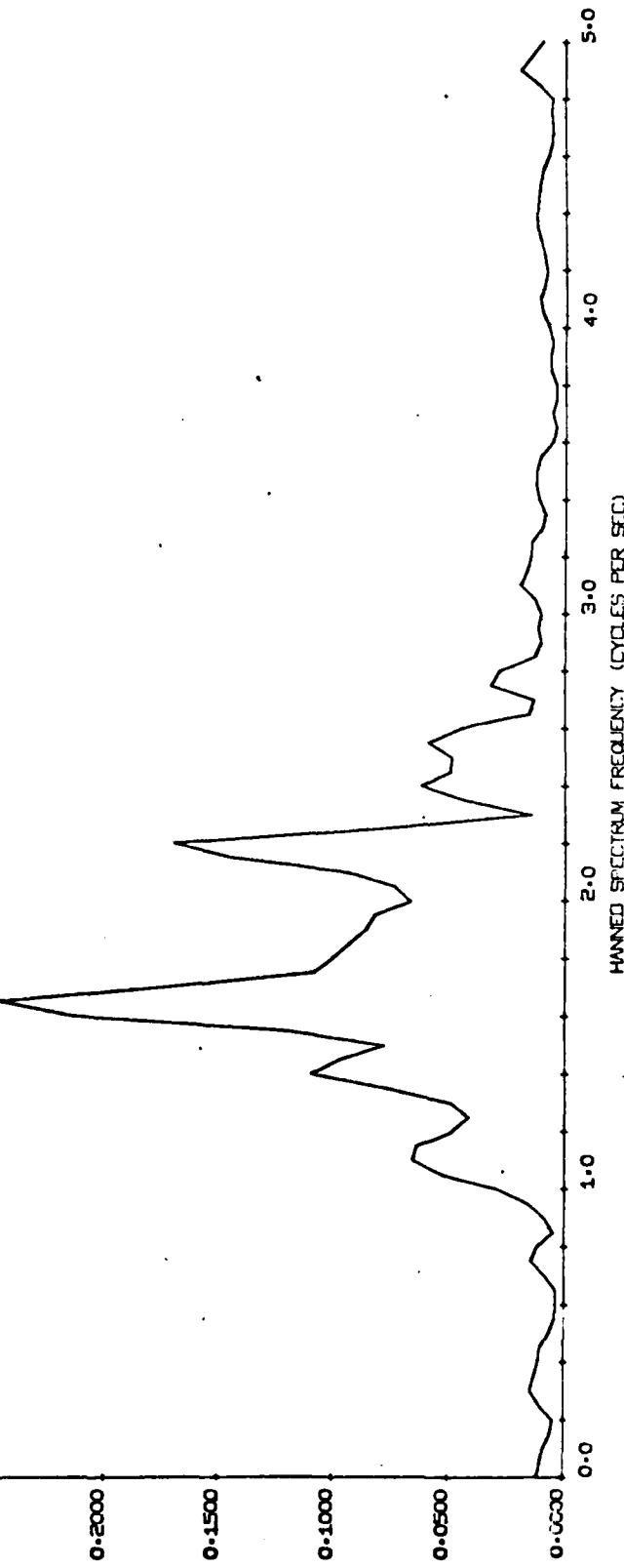
0.0000

SPECTRAL DENSITY (UNITS 50 RER CYCLE PER SEC)

SIG. VALUE = 1.633 UNITS

R.M.S. = 0.423 UNITS

FIGURE 60



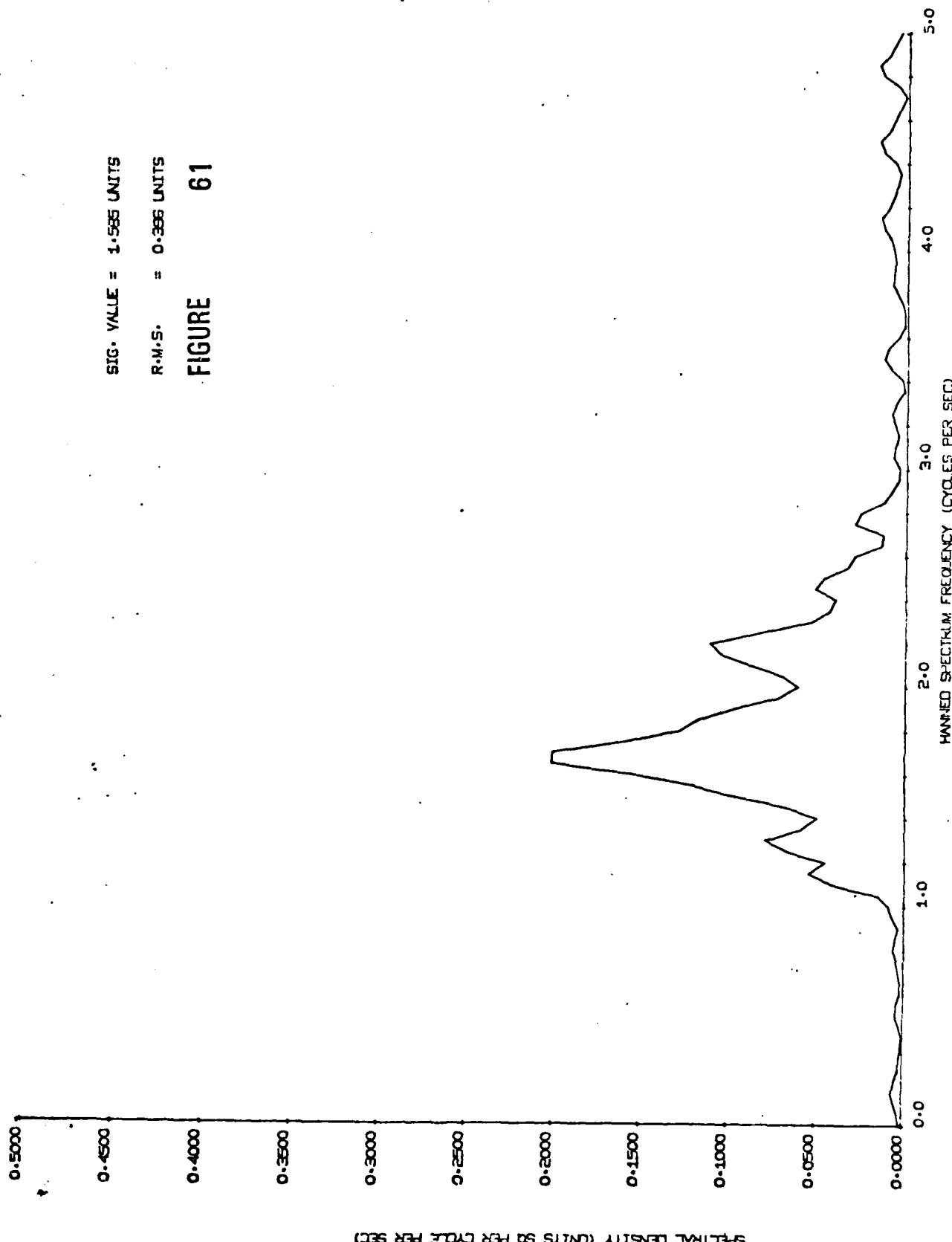
HANNED SPECTRUM FREQUENCY (CYCLES PER SEC)

SEAWINIF TESTS NO. 1 SET MAY 176 - RUN 889 WPT.G AT BOW 5 FT - LM UNITS G.S

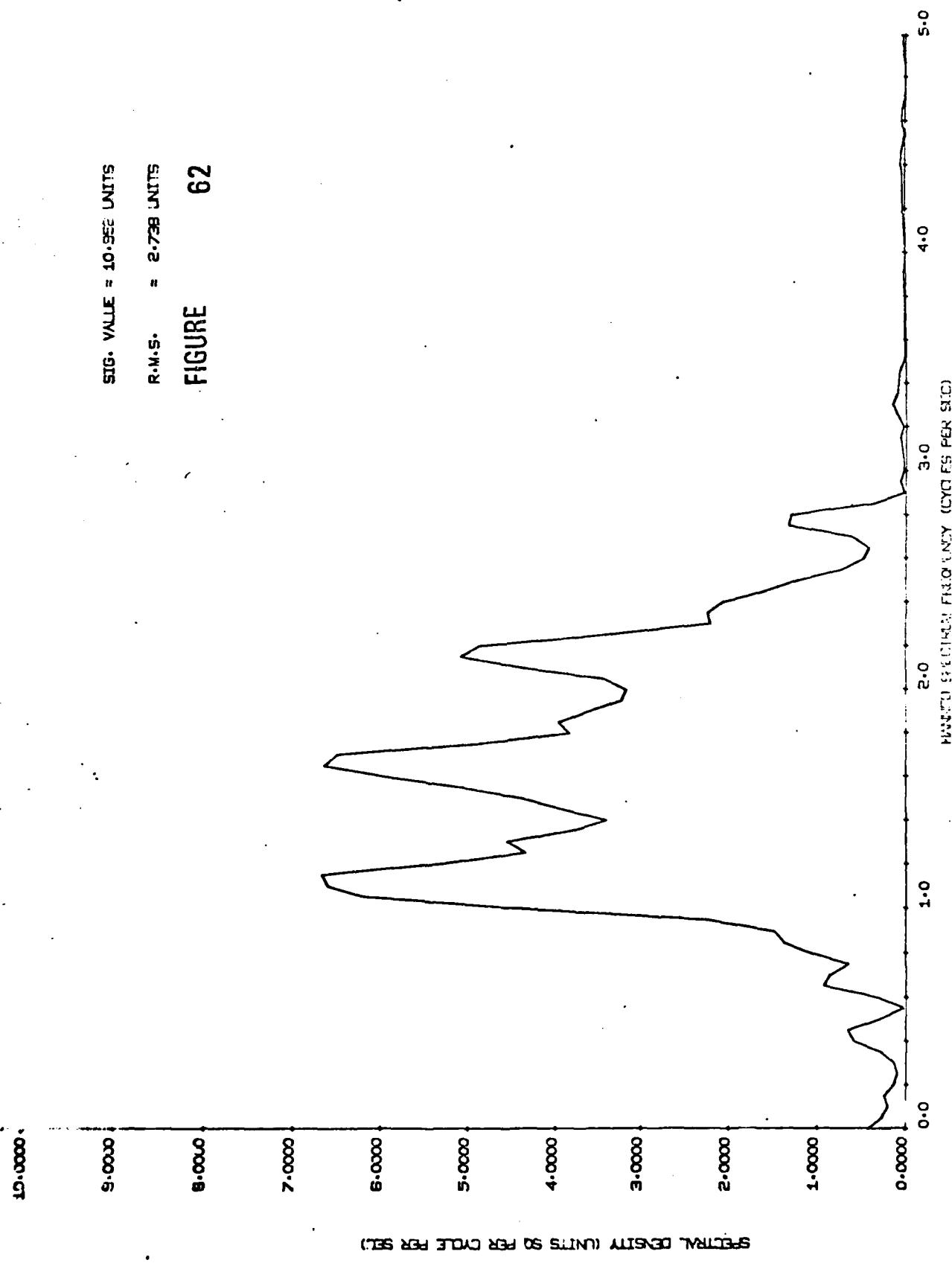
SIG. VALUE = 1.585 UNITS

R.M.S. = 0.385 UNITS

FIGURE 61



SEASCAPE TESTS NO.1 8TH MAY '75 - RUN 889 ENCODED WAVE SPECTRUM UNITS CMS



SCIENTIFIC TESTS NO. 5/T MAY '76 - RUN 500 P.T.H SPECTRUM AT 0 DEGREES

5.0000

4.5000

4.0000

3.5000

3.0000

2.5000

2.0000

1.5000

1.0000

0.5000

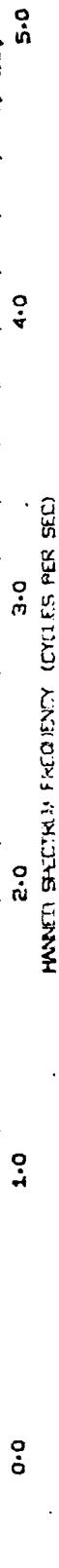
0.0000

SPECTRAL ENERGY (UNITS SD PER CYCLE PER SEC)

SIG. VALUE = 4.0 UNITS

R.M.S. = 1.208 UNITS

FIGURE  
63

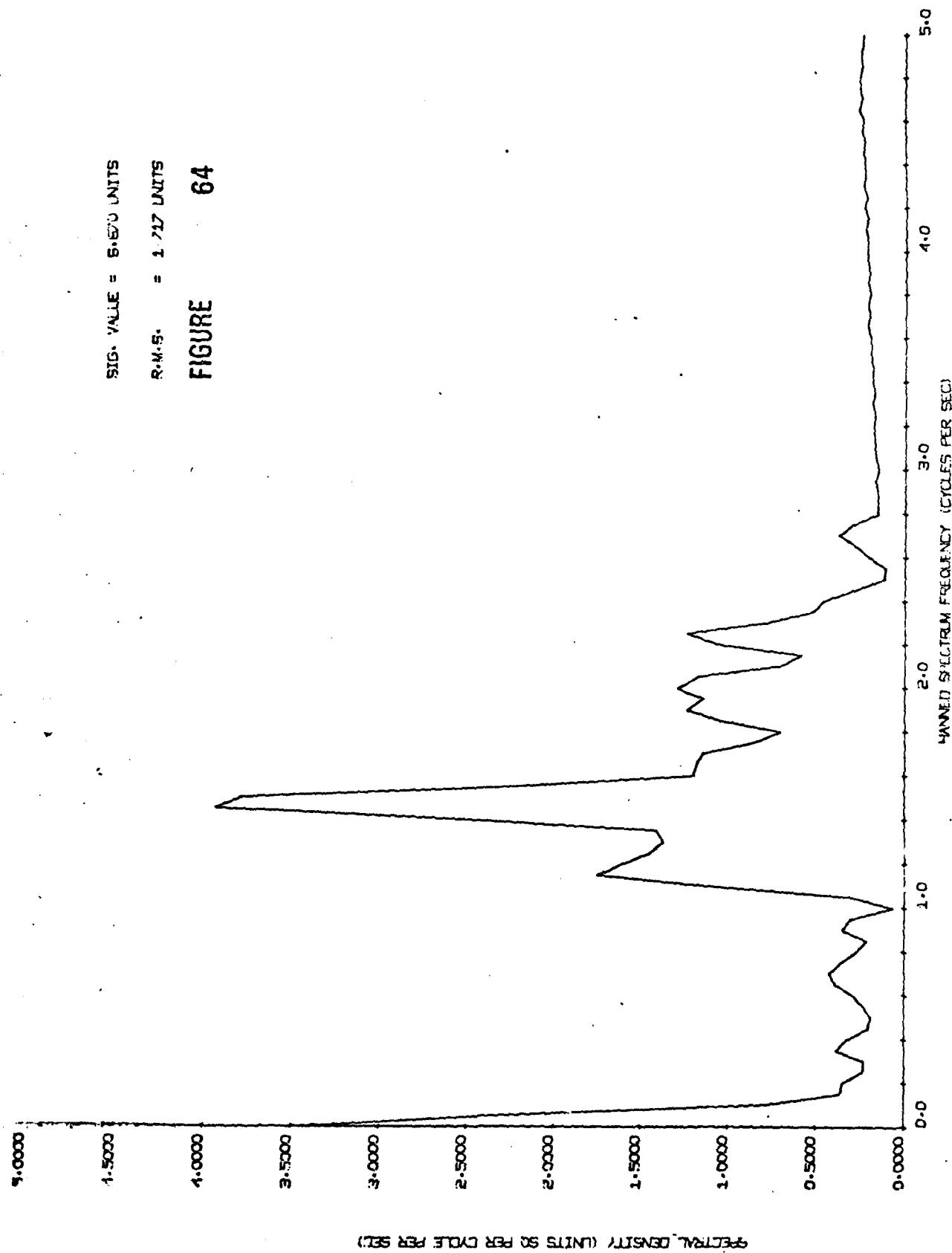


SCALP TESTS NO. 13 MAY '75 - RUN 900 HAVING SPECTRAL WIDTHS CENTIMETRES

SIG. VALUE = 6.650 UNITS

R.M.S. = 1.717 UNITS

FIGURE 64



EXKNIFF TESTS NO. 1 AT MAY 17 - RN 900 VERT. 3 AT 5.0 SPI. IN UNITS G.S

0.1000

0.0800

0.0600

0.0400

0.0200

0.0000

-0.0200

-0.0400

-0.0600

-0.0800

-0.1000

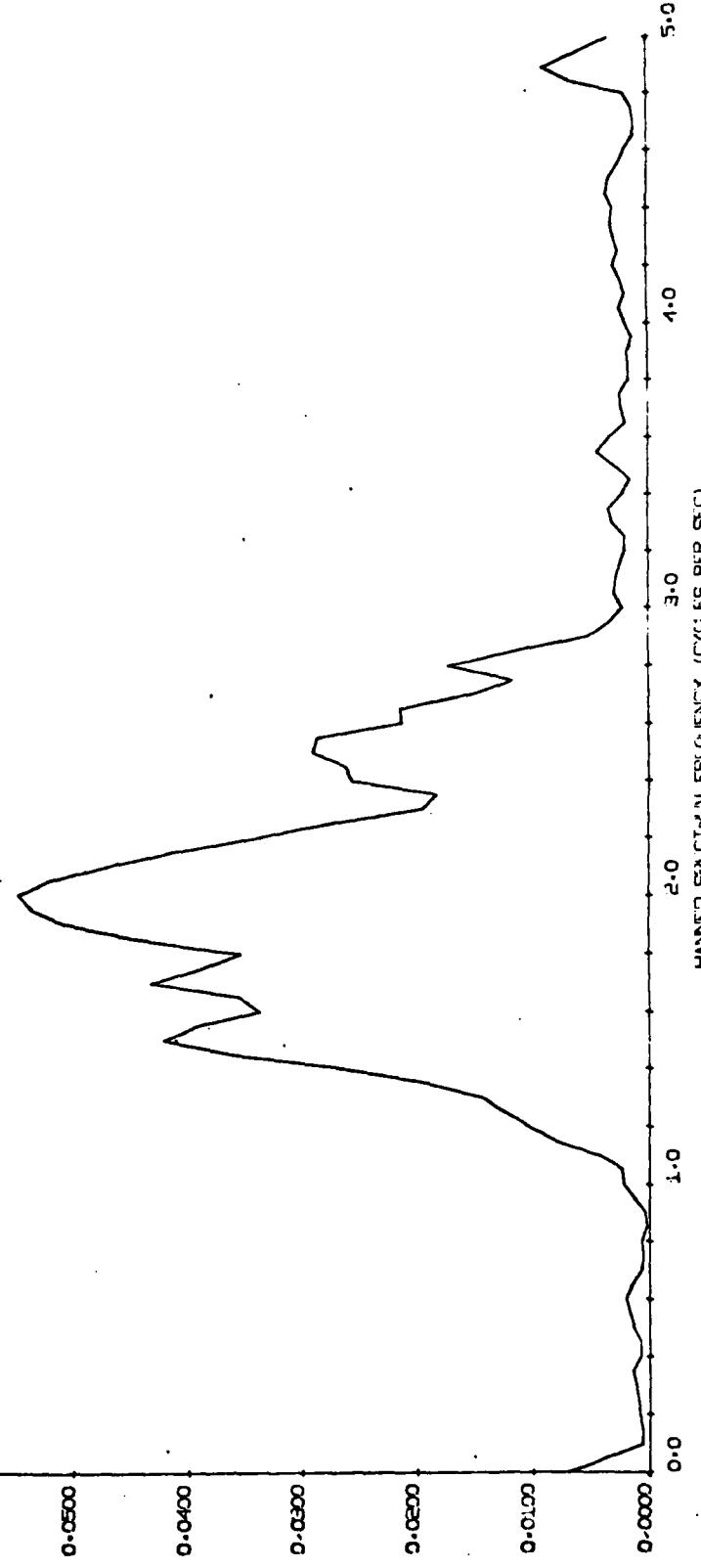
SIG. VALUE = 0.19 L/S

R.M.S. = 0.244 UNITS

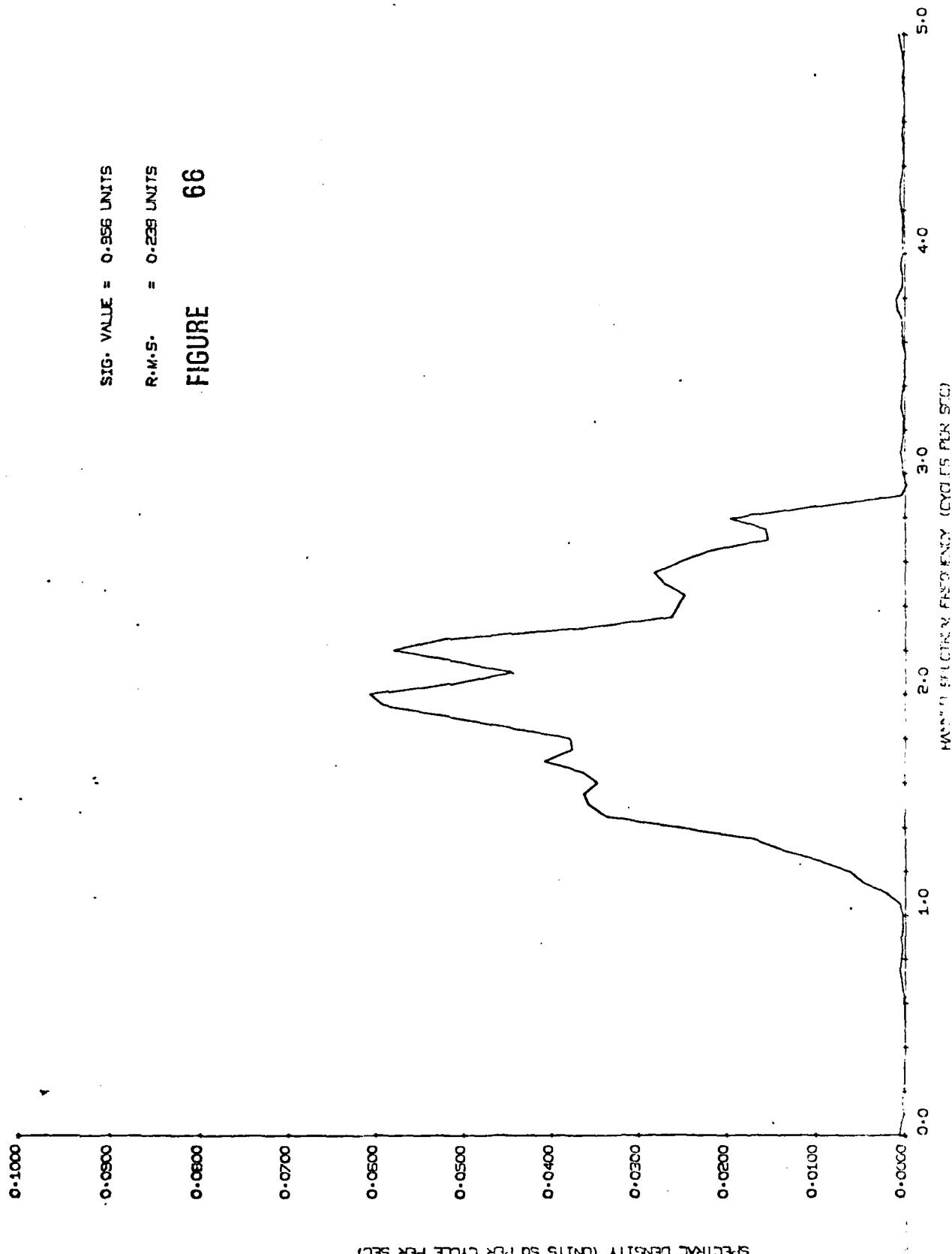
FIGURE

65

SPECTRAL DENSITY (UNITS SD PER CYCLE PER SEC)



SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN 500 VERT.G AT BOW SPECTRUM UNITS G.S

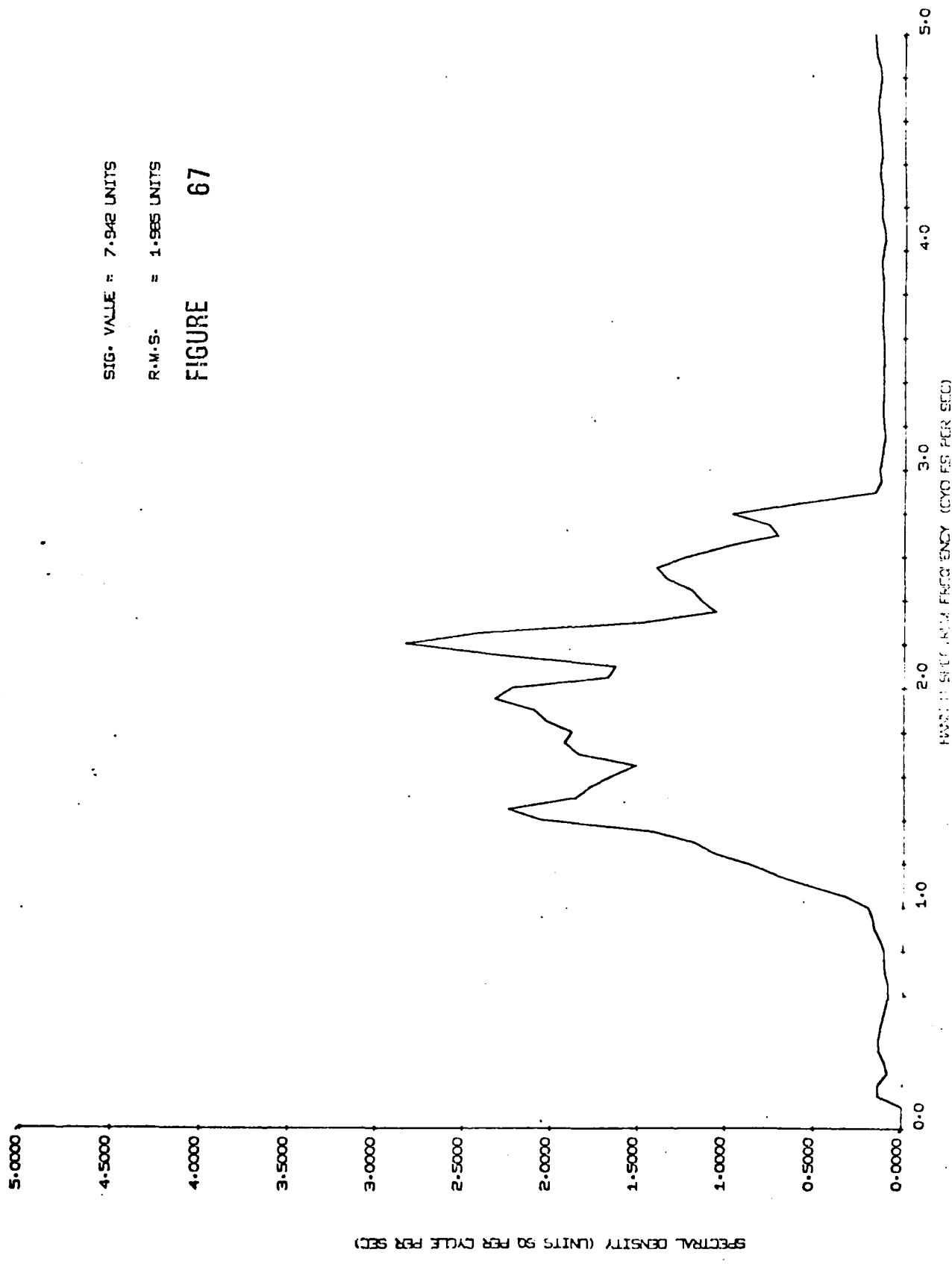


SEAKNIFE TESTS NO.1 S/T MAY 1976 - RUN 900 ENCOUNTERED WAVE SPECTRUM UNITS CMS

SIG. VALUE = 7.942 UNITS

R.M.S. = 1.985 UNITS

FIGURE  
67



SEAKNITE TESTS NO.1 S/T MAY 76 - RUN 908 VERT.G AT C.G. SPECTRUM UNITS G.S

0.000

0.000

0.000

0.000

0.000

0.000

0.000

0.000

0.000

0.000

0.000

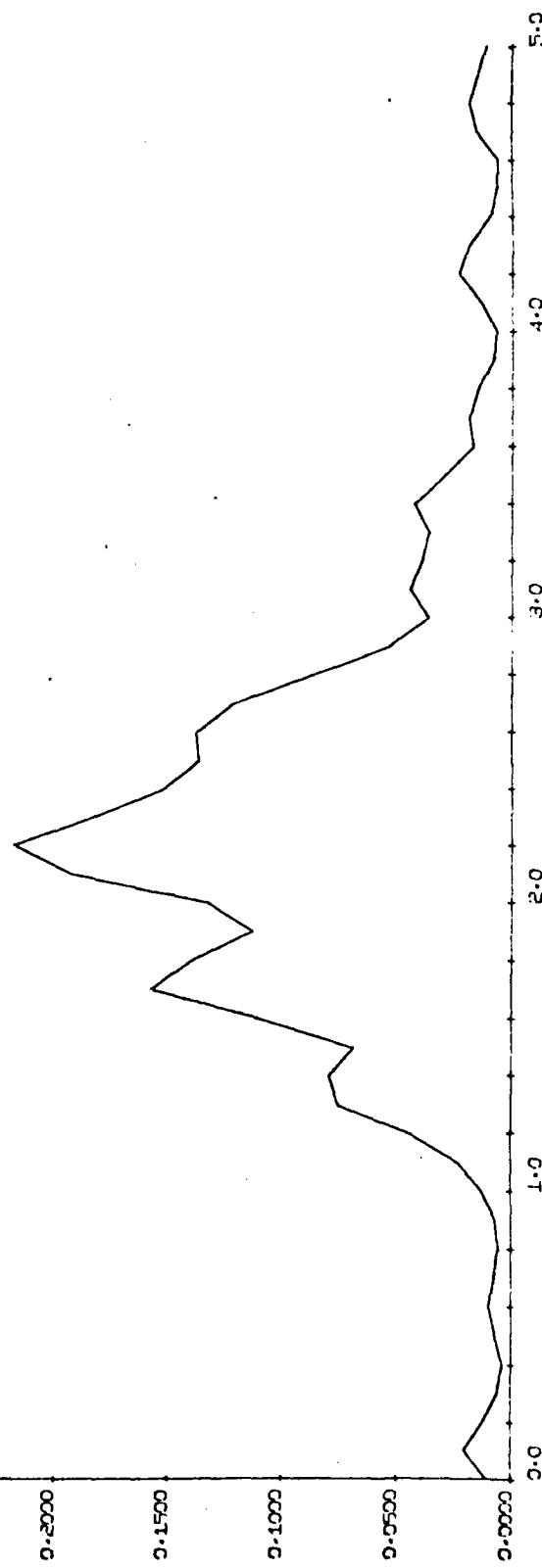
SPECTRAL DENSITY UNITS 50 PER CYCLE PER SEC

HIGH CHANNEL SPECTRUM FREQUENCY CYCLES PER SEC

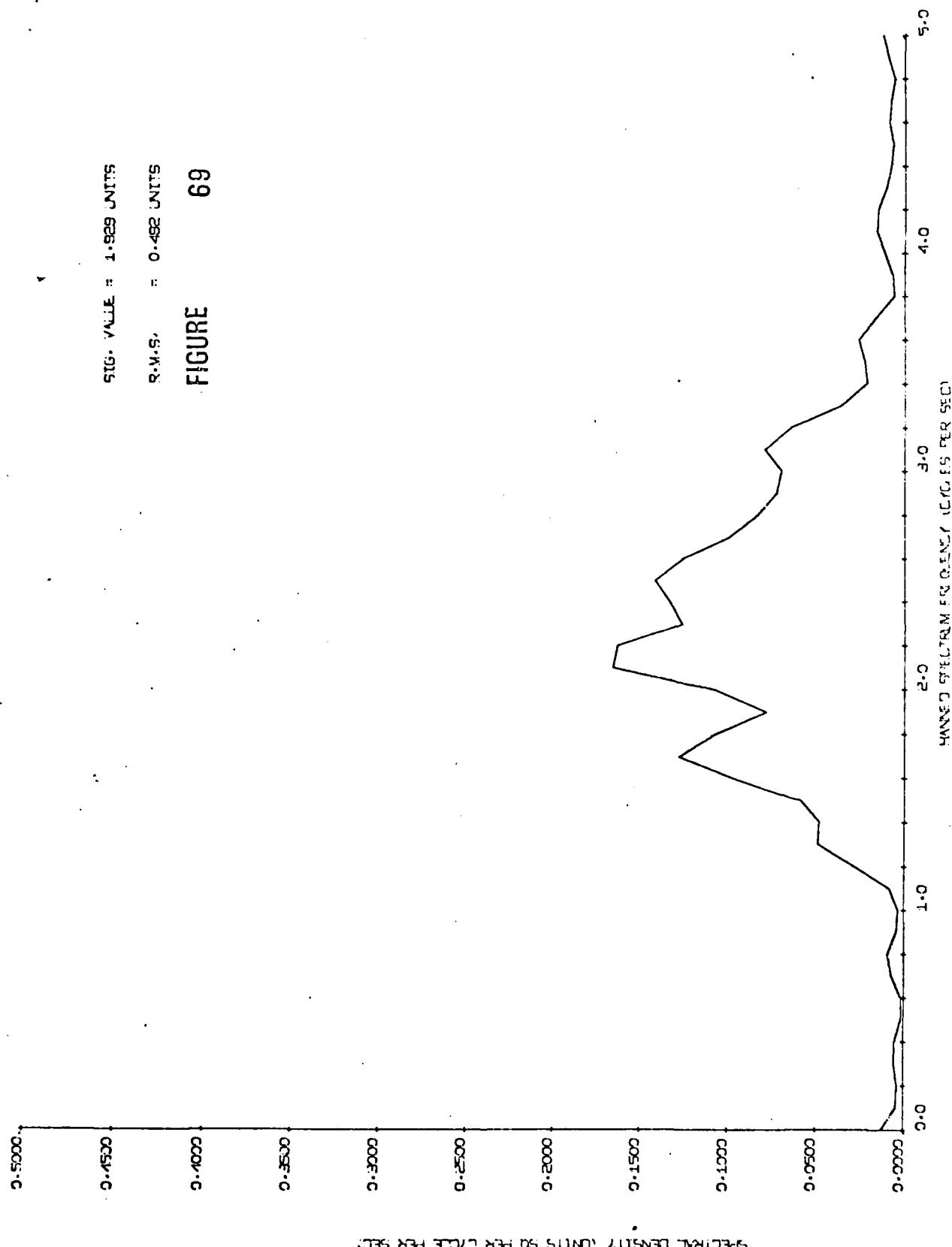
SIG. VALUE = 2.005 UNITS

R.M.S. = 0.523 UNITS

FIGURE 68



SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN 508 VERT.G AT BOW SPECTRUM UNITS G.S

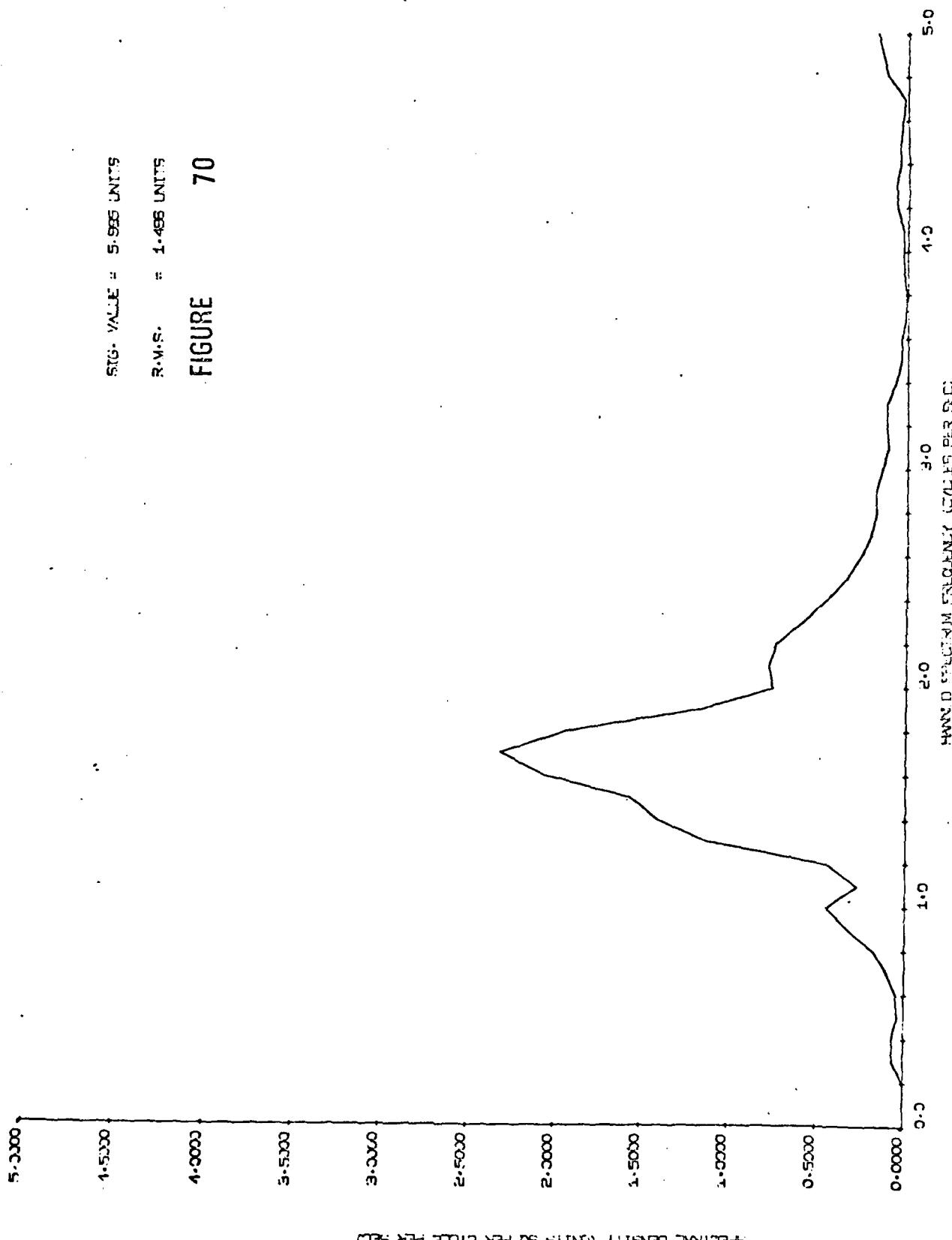


SEAKNIFE TESTS NO.1 5.T MAY '76 - RUN 909 PITCH SPECTRUM UNITS DEGREES

SIG. VALUE = 5.965 UNITS

R.M.S. = 1.486 UNITS

FIGURE 70

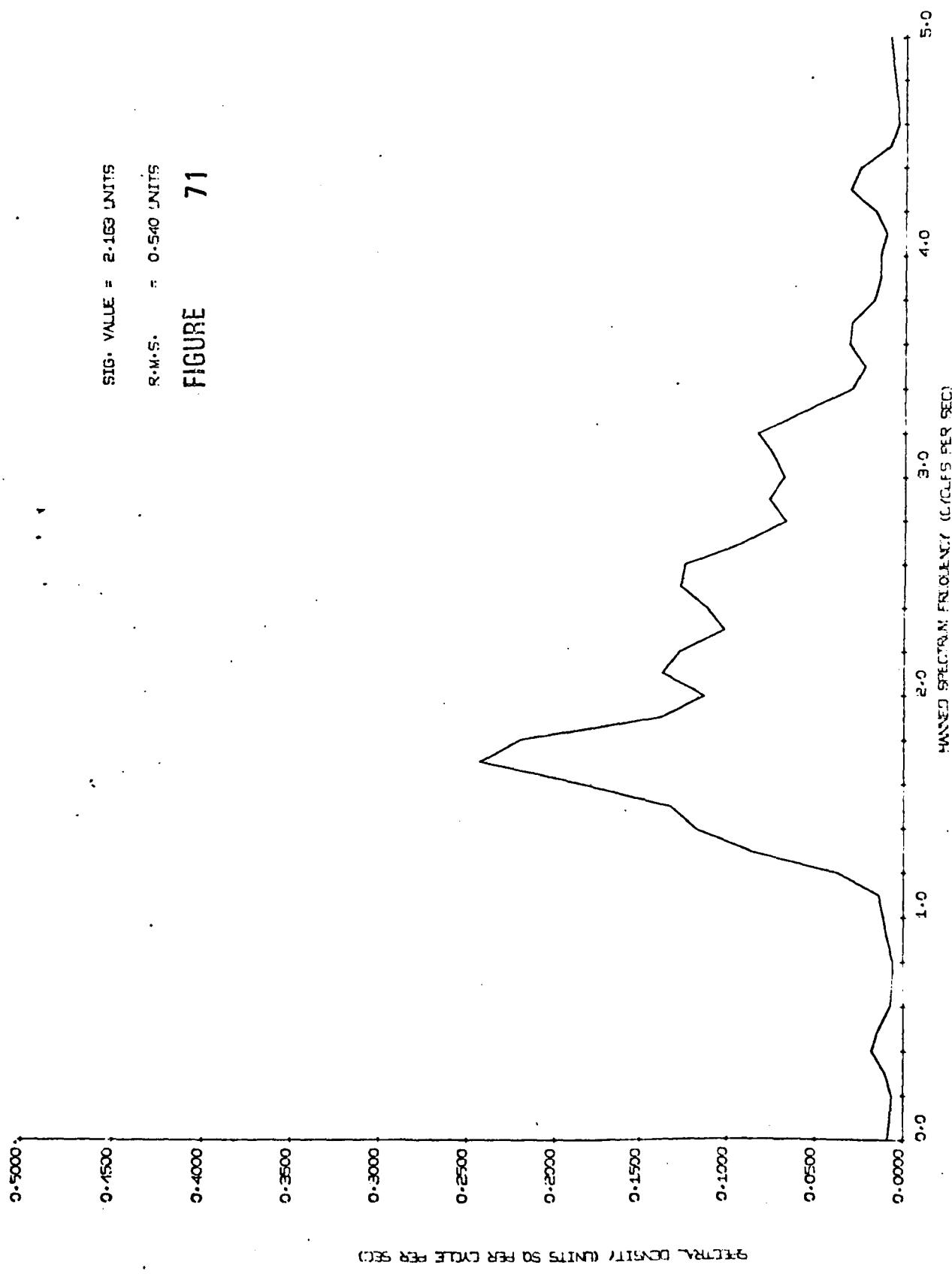


SEAKNITE TESTS NO.1 S/T MAY '76 - RUN 509 VERT.G AT C.G. SPECTRUM UNITS G.S

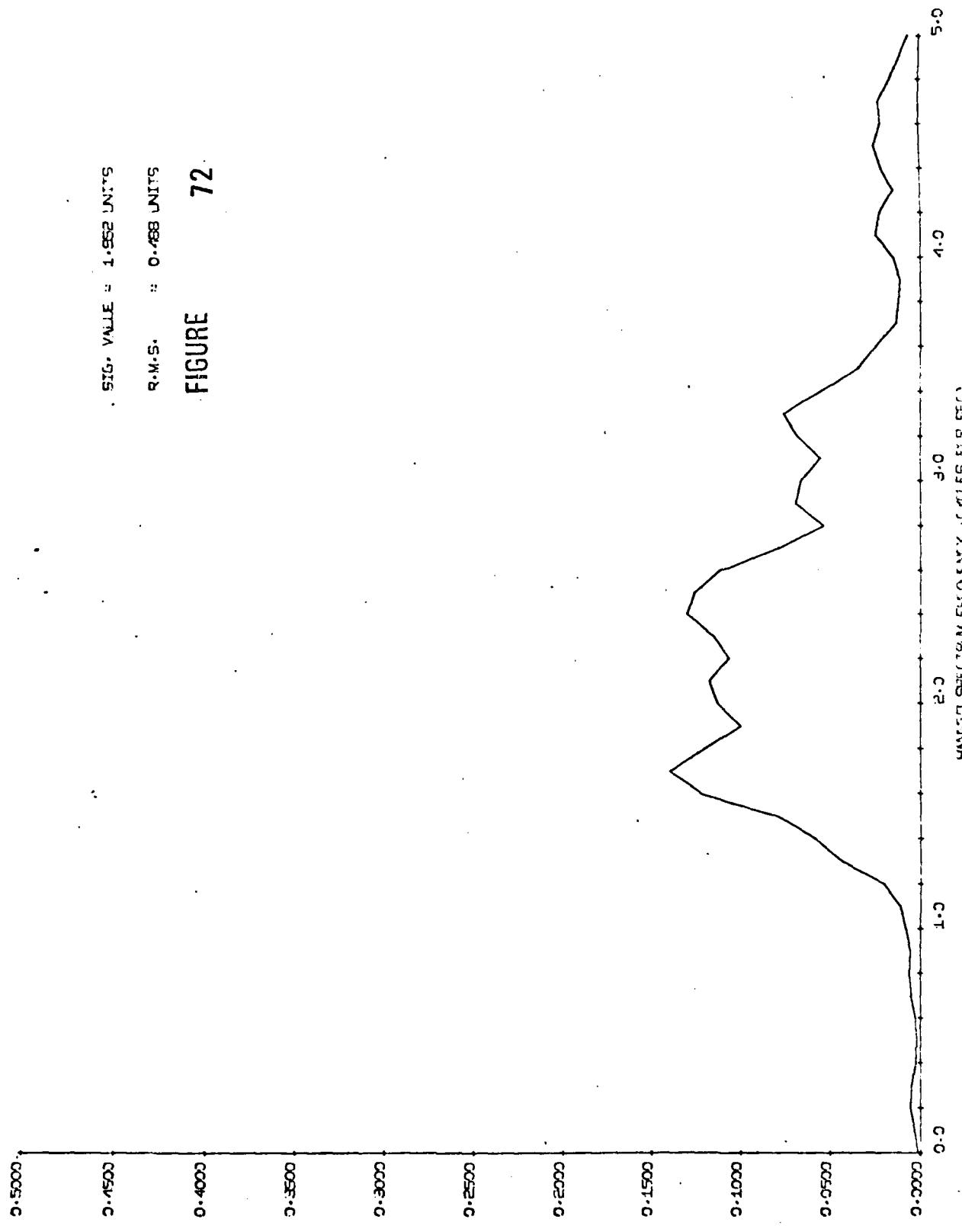
SIG. VALUE = 2.163 UNITS

R.M.S. = 0.540 UNITS

FIGURE 71

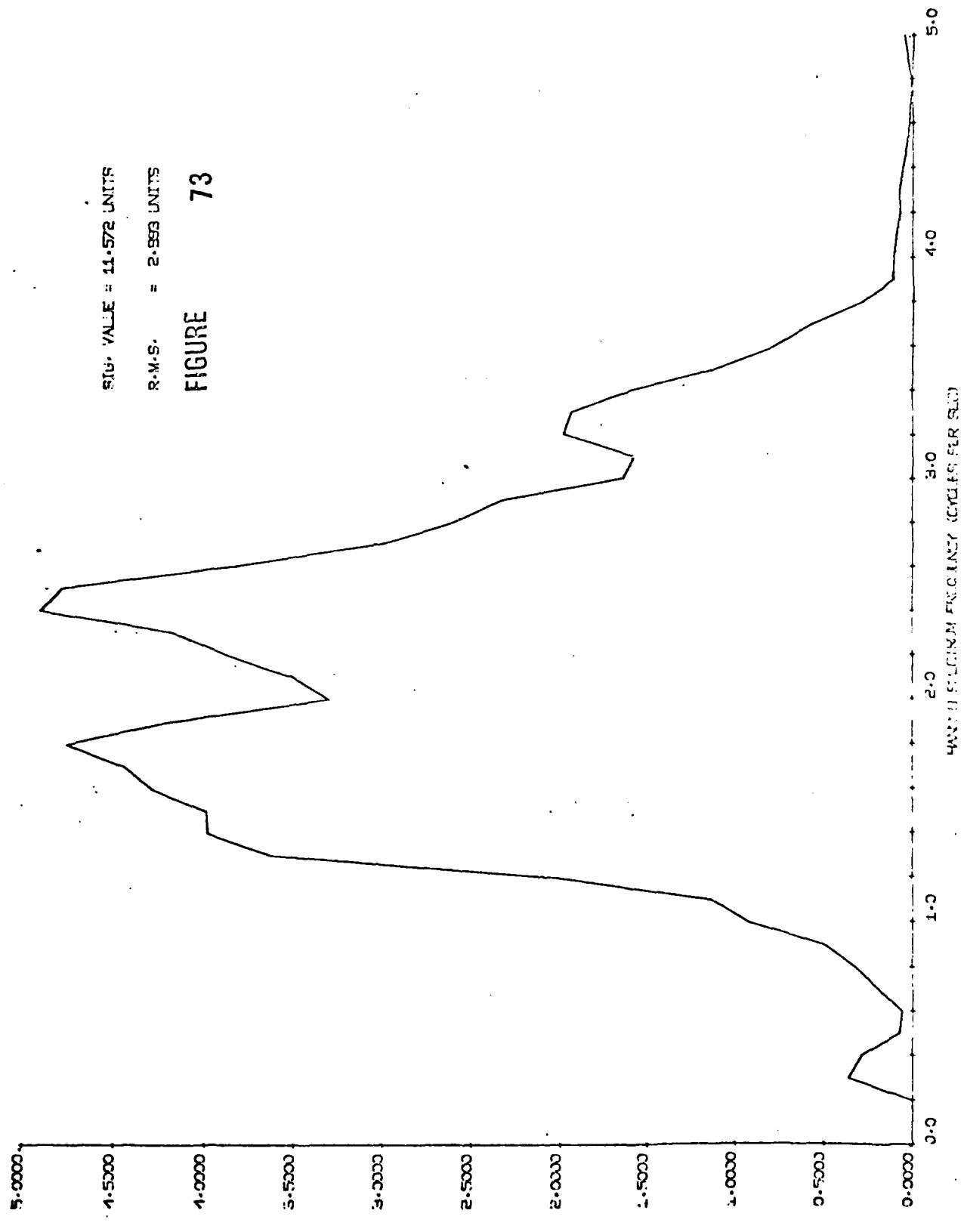


SEKINIFE TESTS NO.1 S/T MAY 76 - RUN 909 VERT.G AT BOW SPECTRUM UNITS G.S



SPECTRAL DENSITY (UNITS G PER CYCLE PER SEC)

SEAKNIFE TESTS NO. 1 S.T. MAY '76 .. RLN 909 ENCOUNTERED WAVE SPECTRUM UNITS CMS

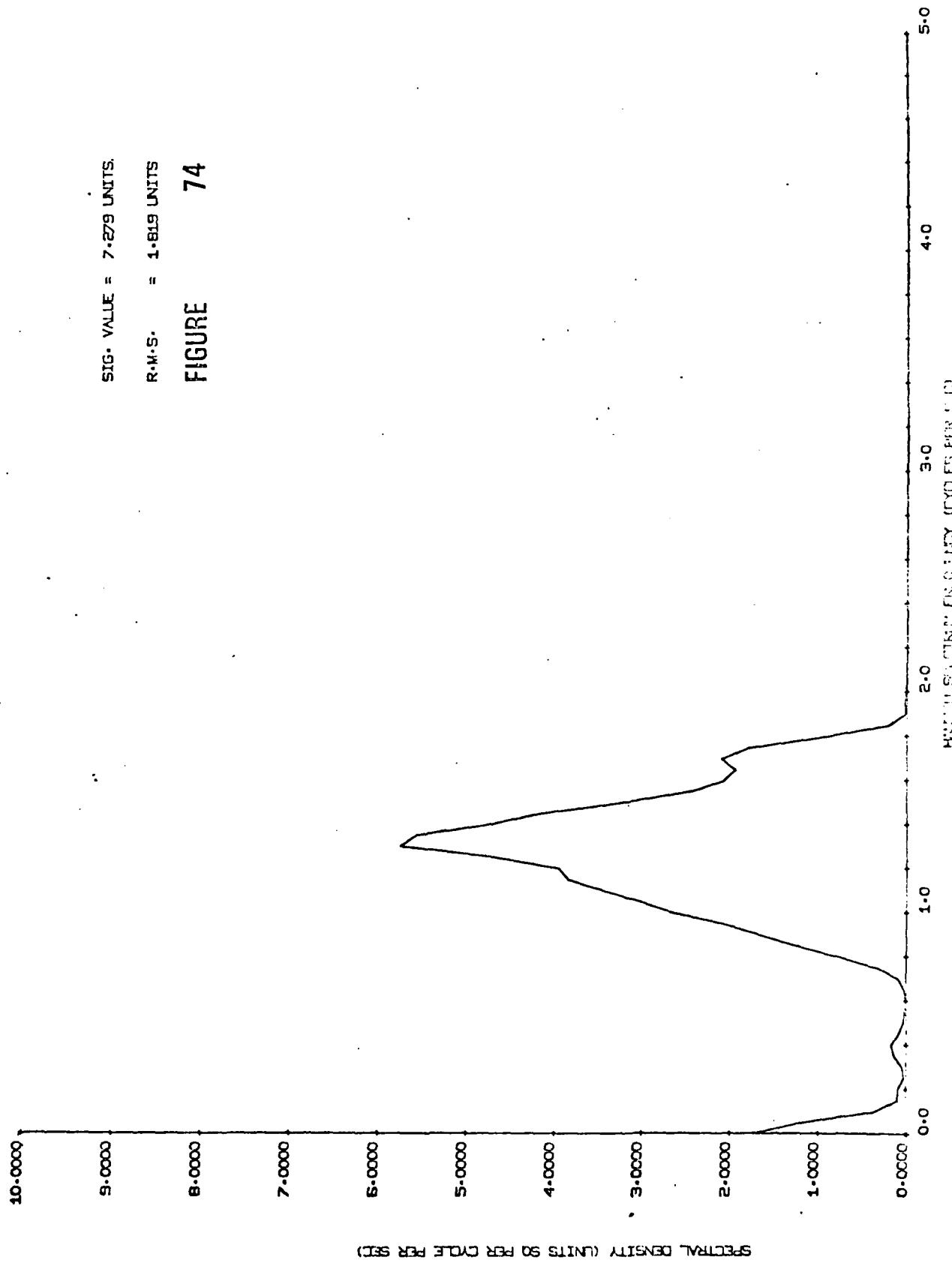


SEAKNIFE TESTS ND-1 S/T MAY '76 - RUN 924 PITCH SPECTRUM - UNITS DEGREES

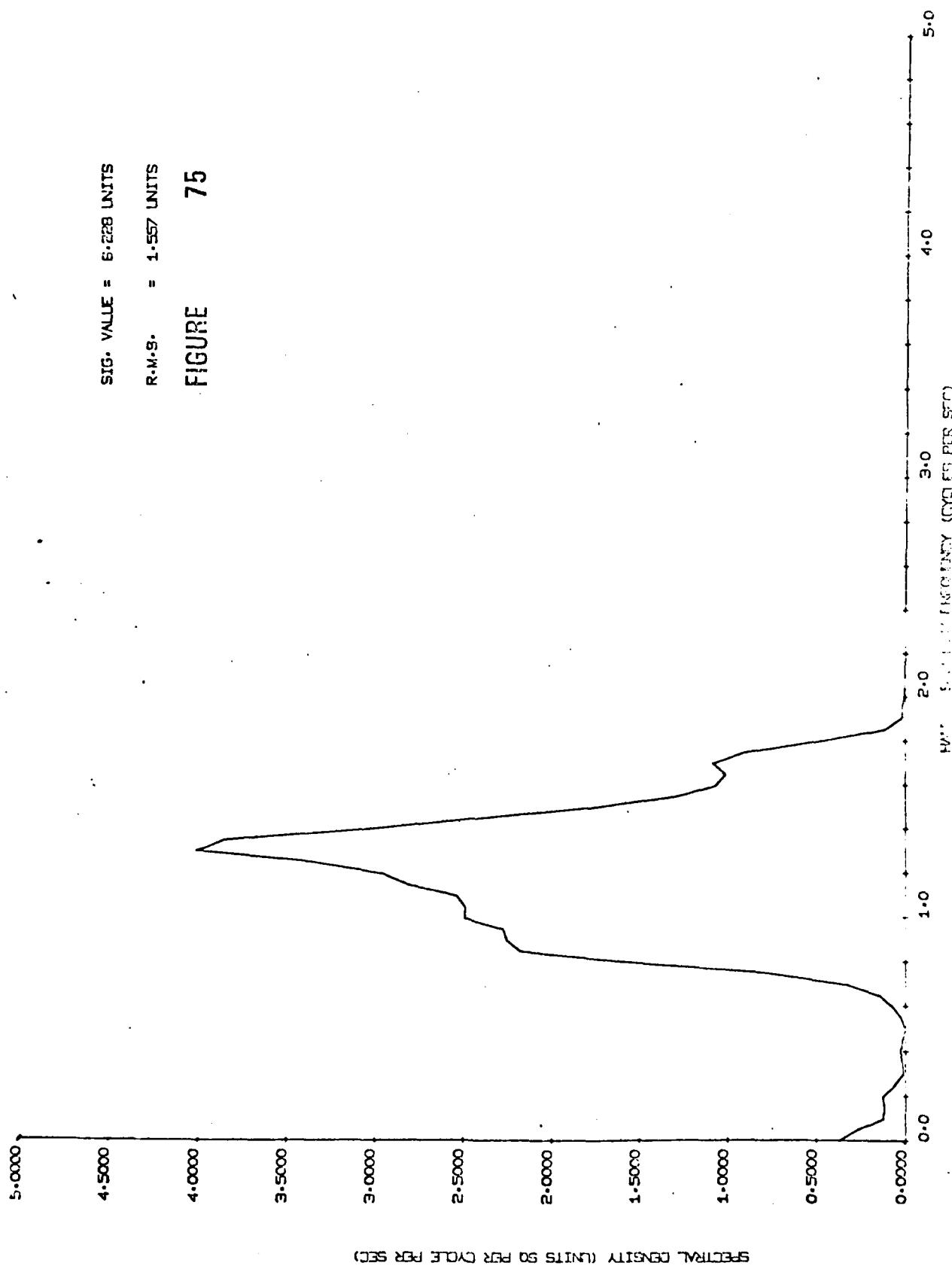
SIG. VALUE = 7.279 UNITS.

R.M.S. = 1.819 UNITS

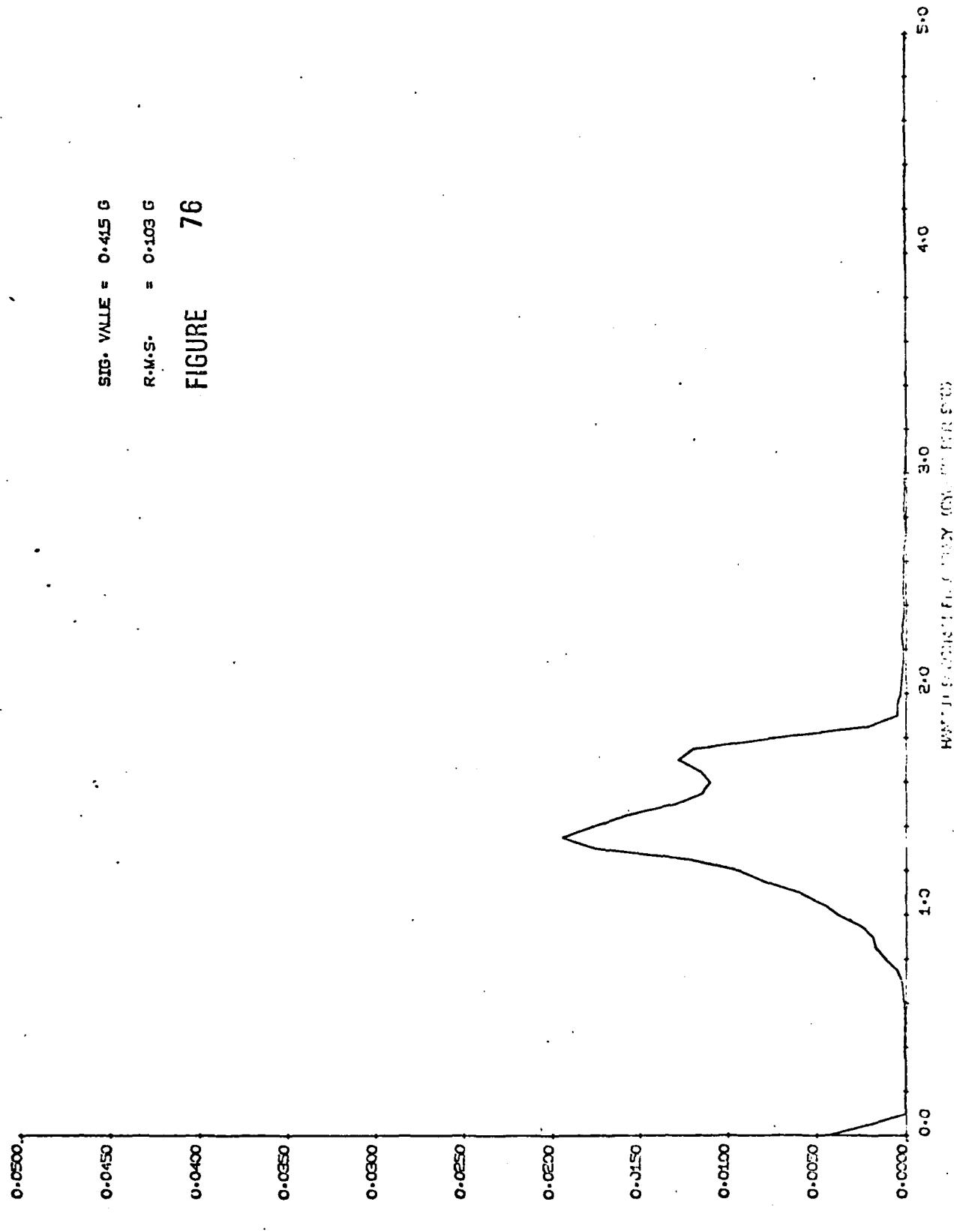
FIGURE 74



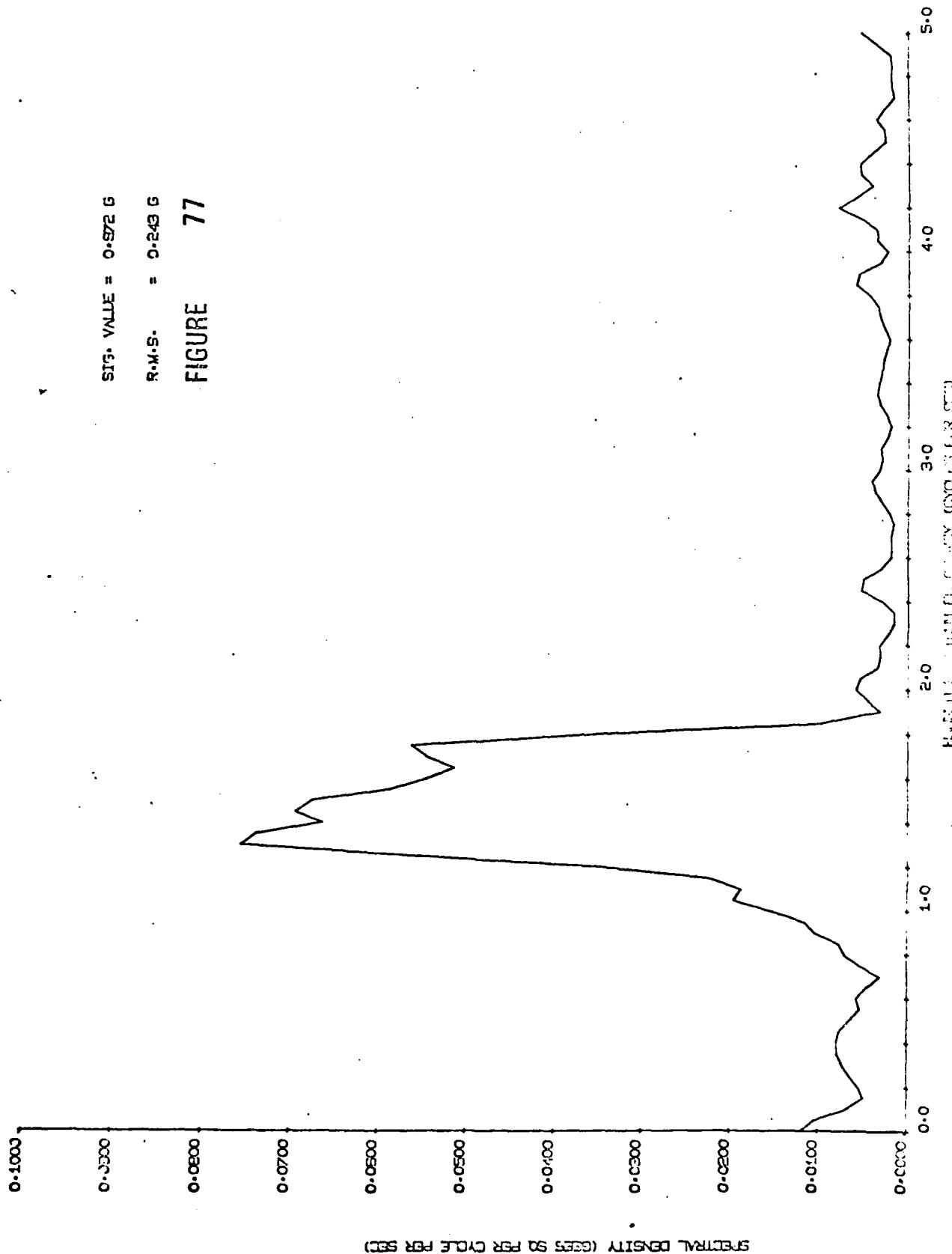
SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN 924 HEAVE SPECTRUM - UNITS CENTIMETRES



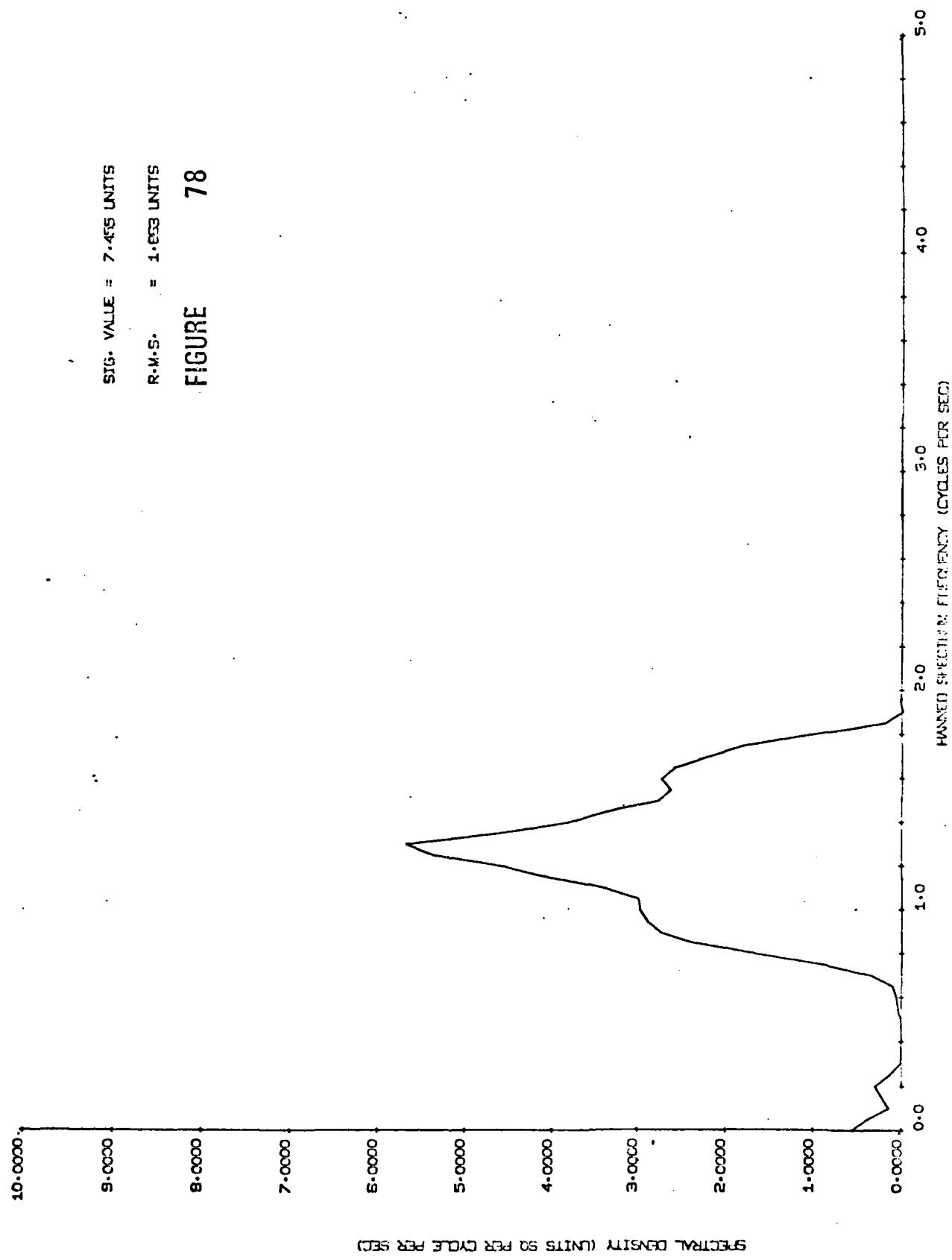
SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN 924 VERT.G AT C.G. SPECTRUM



SEAKNIFE TESTS NO.1 S/T MAY '76 - RLN 924 VERT.G AT BOW SPECTRUM



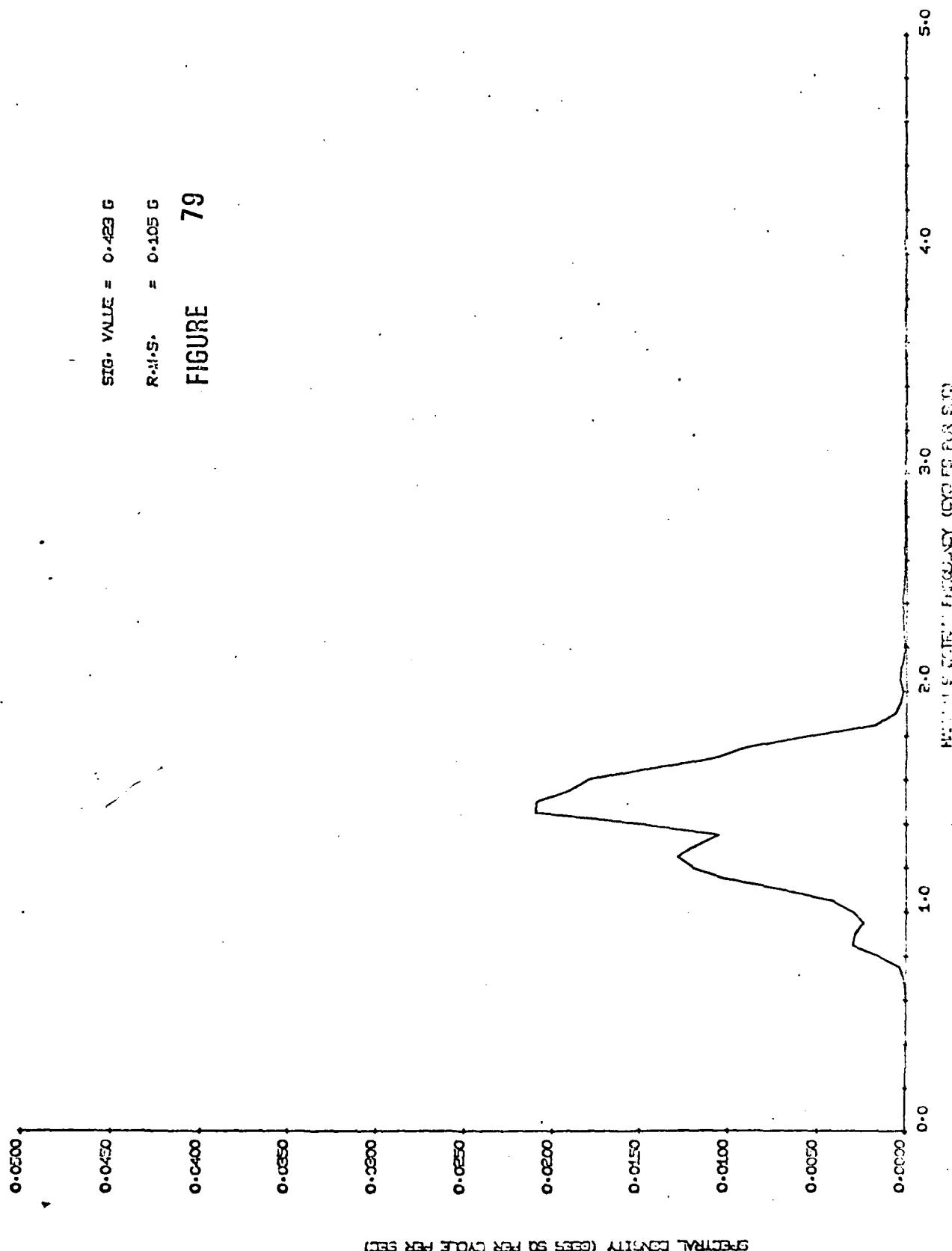
SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN 924 ENCOUNTERED WAVE SPECTRUM - UNITS CMS



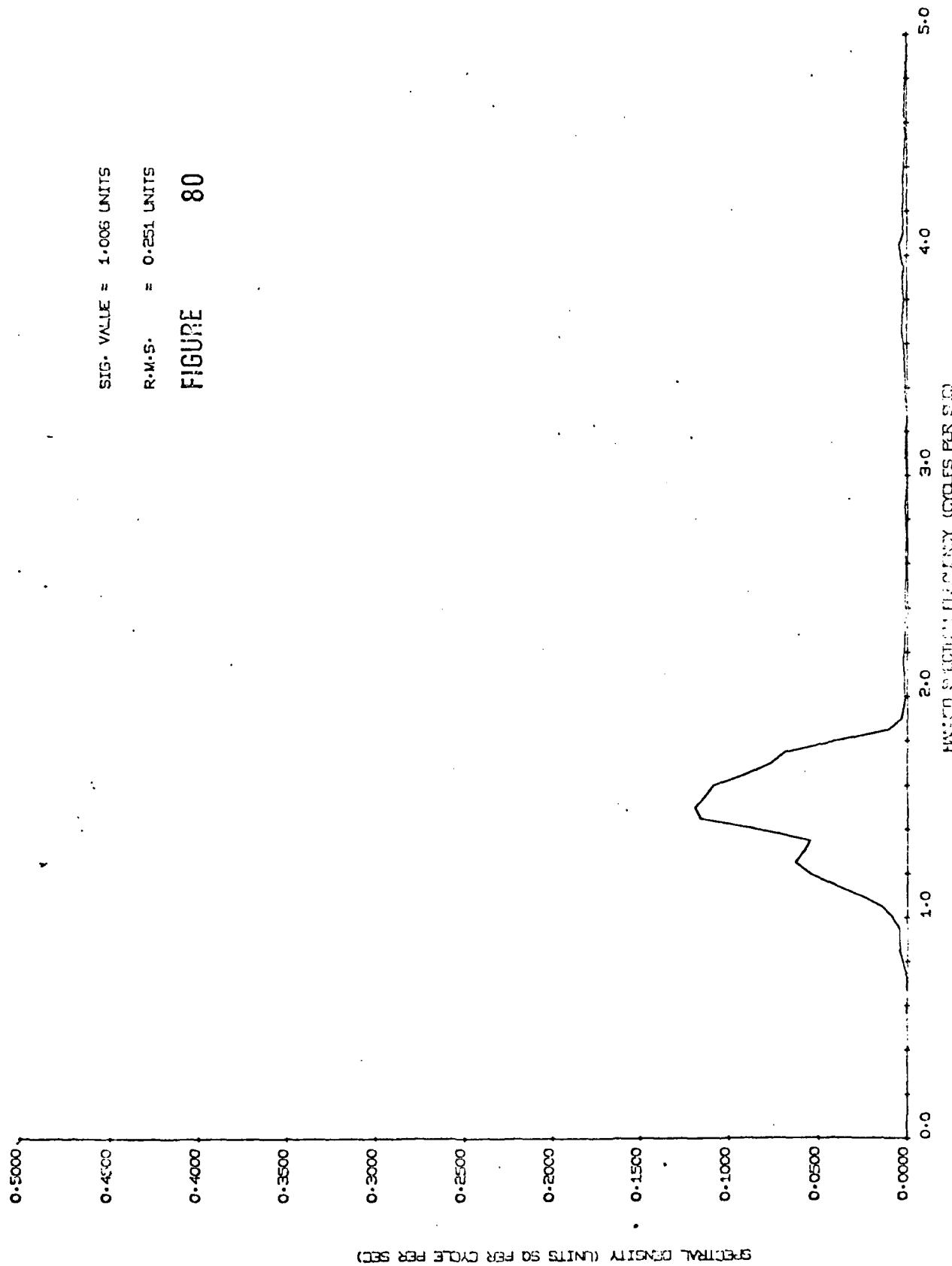
SEANIFE TESTS NO.1 SAT MAY '76 - RUN 925 VERT.G AT C.G. SPECTRUM

SIG. VALUE = 0.423 G  
R.M.S. = 0.105 G

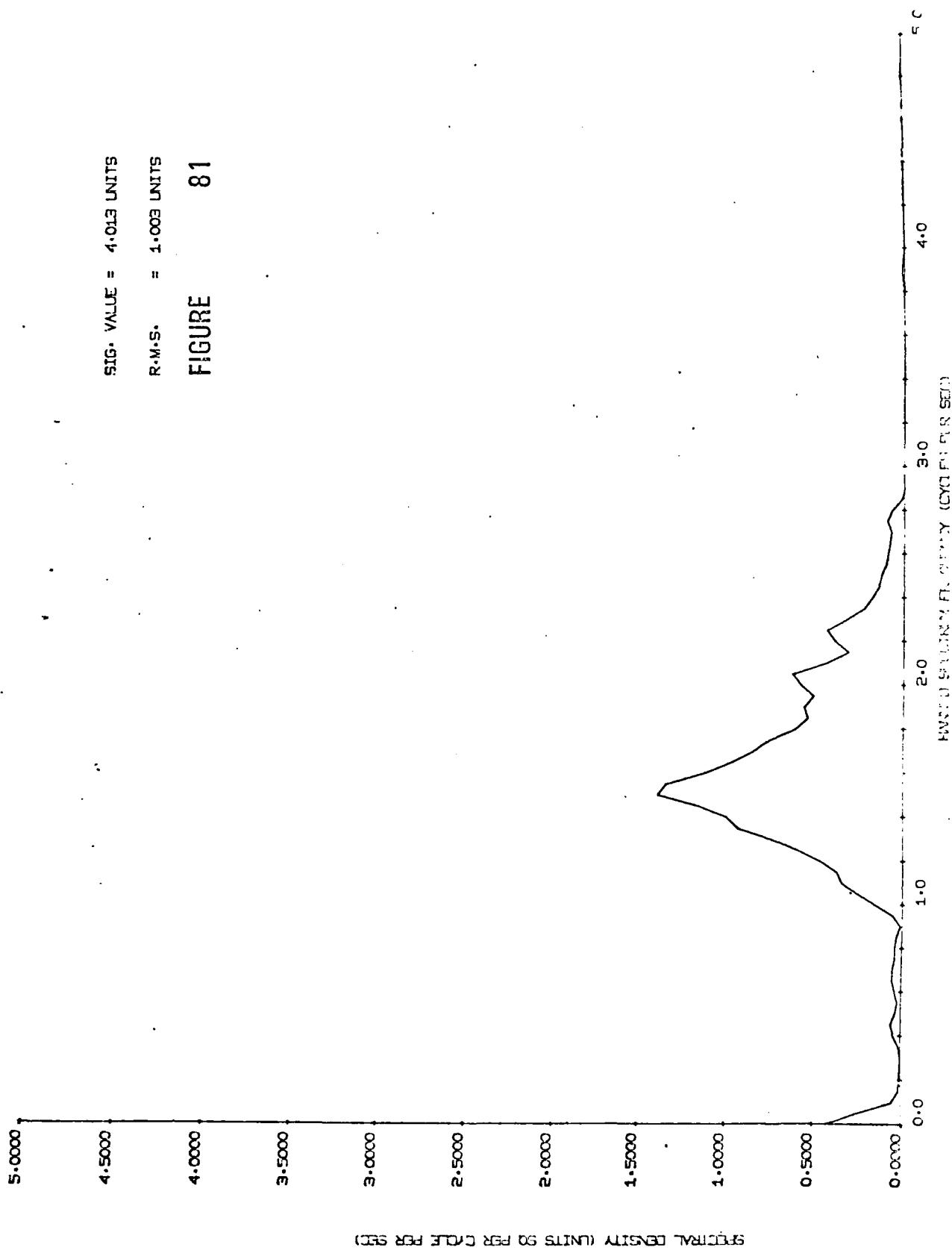
FIGURE 79



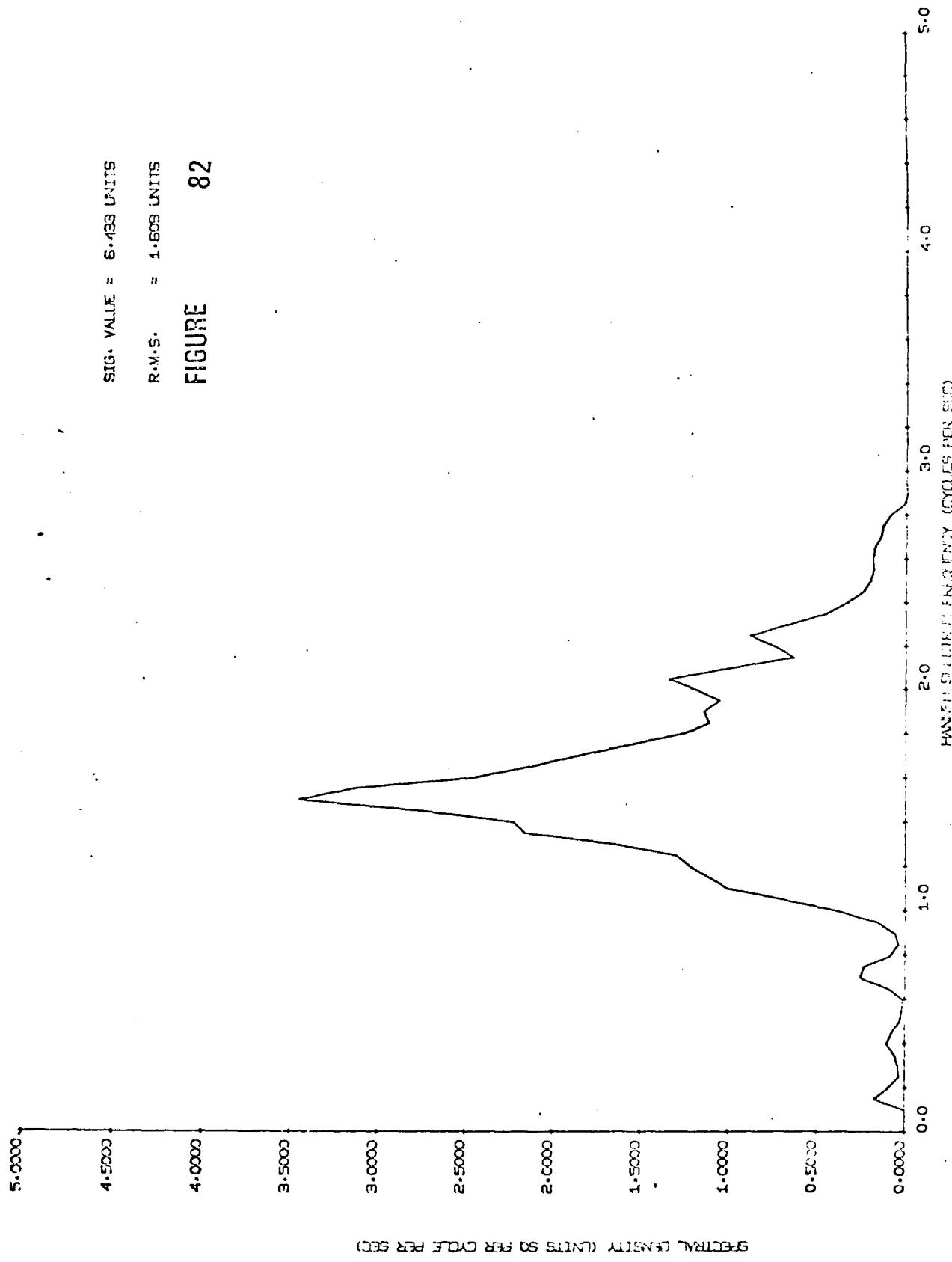
SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN 925 VERT.G AT BOW SPECTRUM UNITS G.S



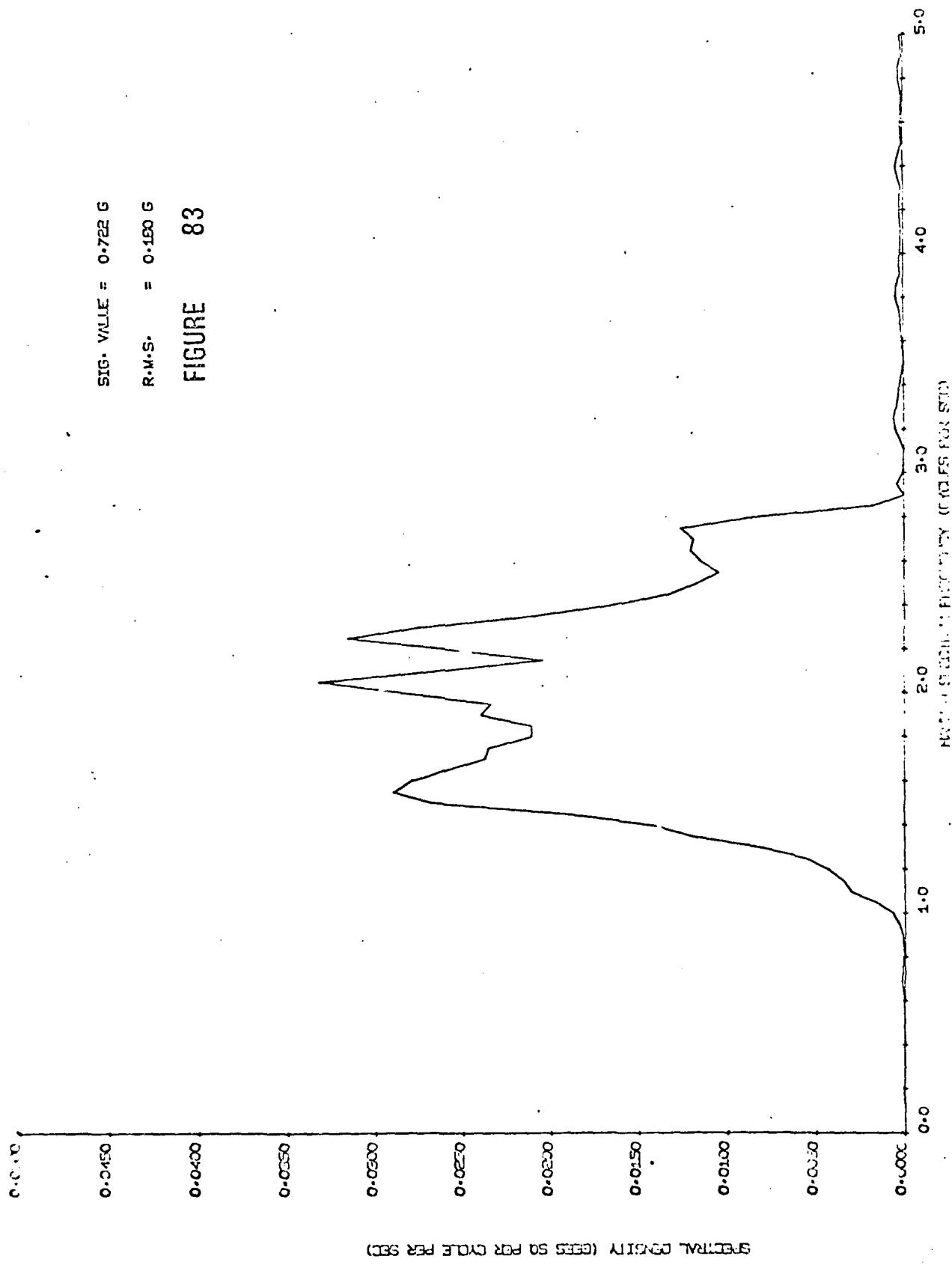
SEAWIND TESTS NO.1 SAT MAY '76 - RUN 928 PITCH SPECTRUM - UNITS DEGREES



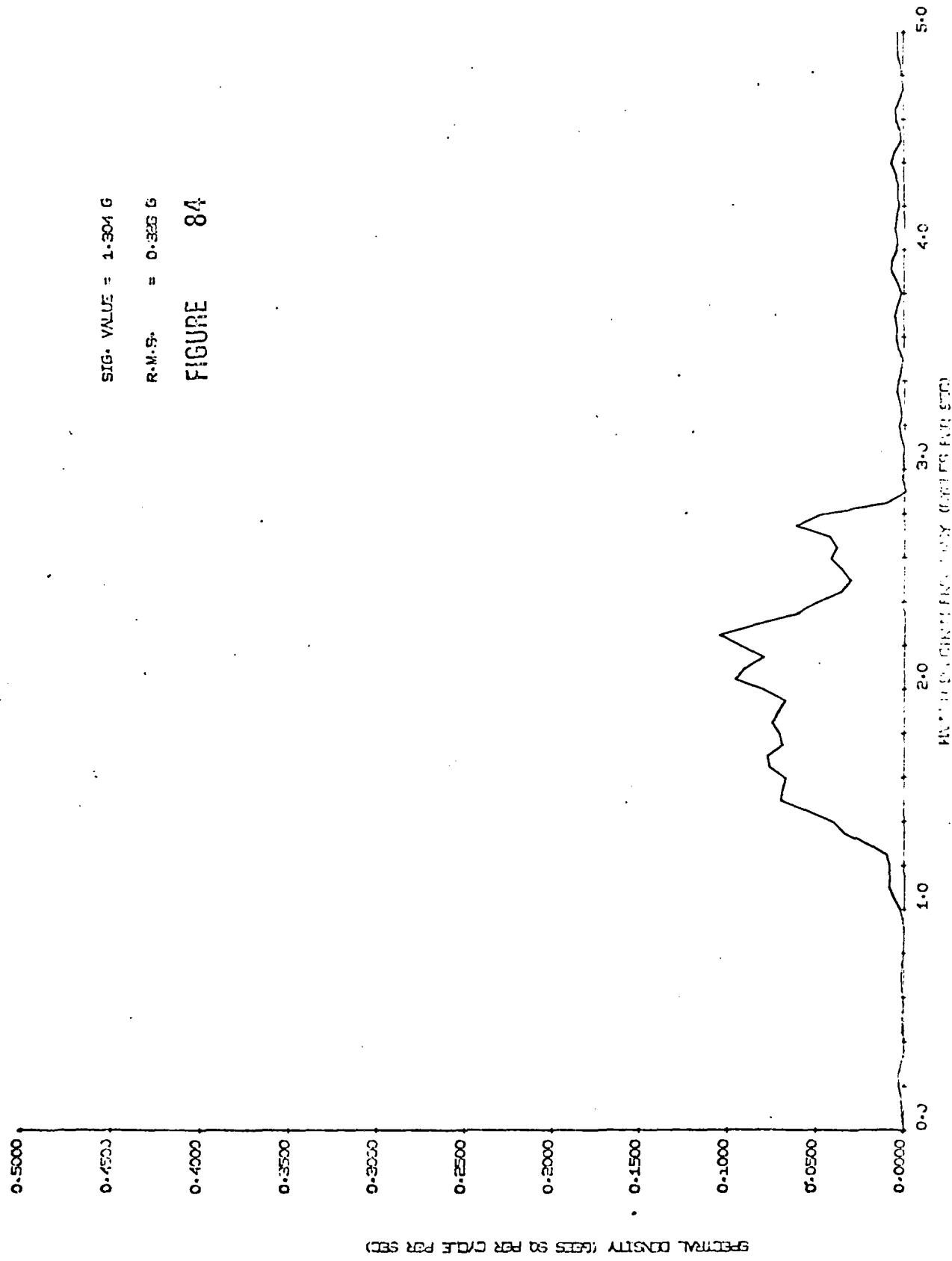
SEAWINIF TESTS NO.1 S/T MAY '76 - RUN 923 HEAVE SPECTRUM - UNITS CENTIMETRES



SCANNING TESTS NO.1 SAT MAY '76 - RUN 228 VERT.G AT C.G. SPECTRUM



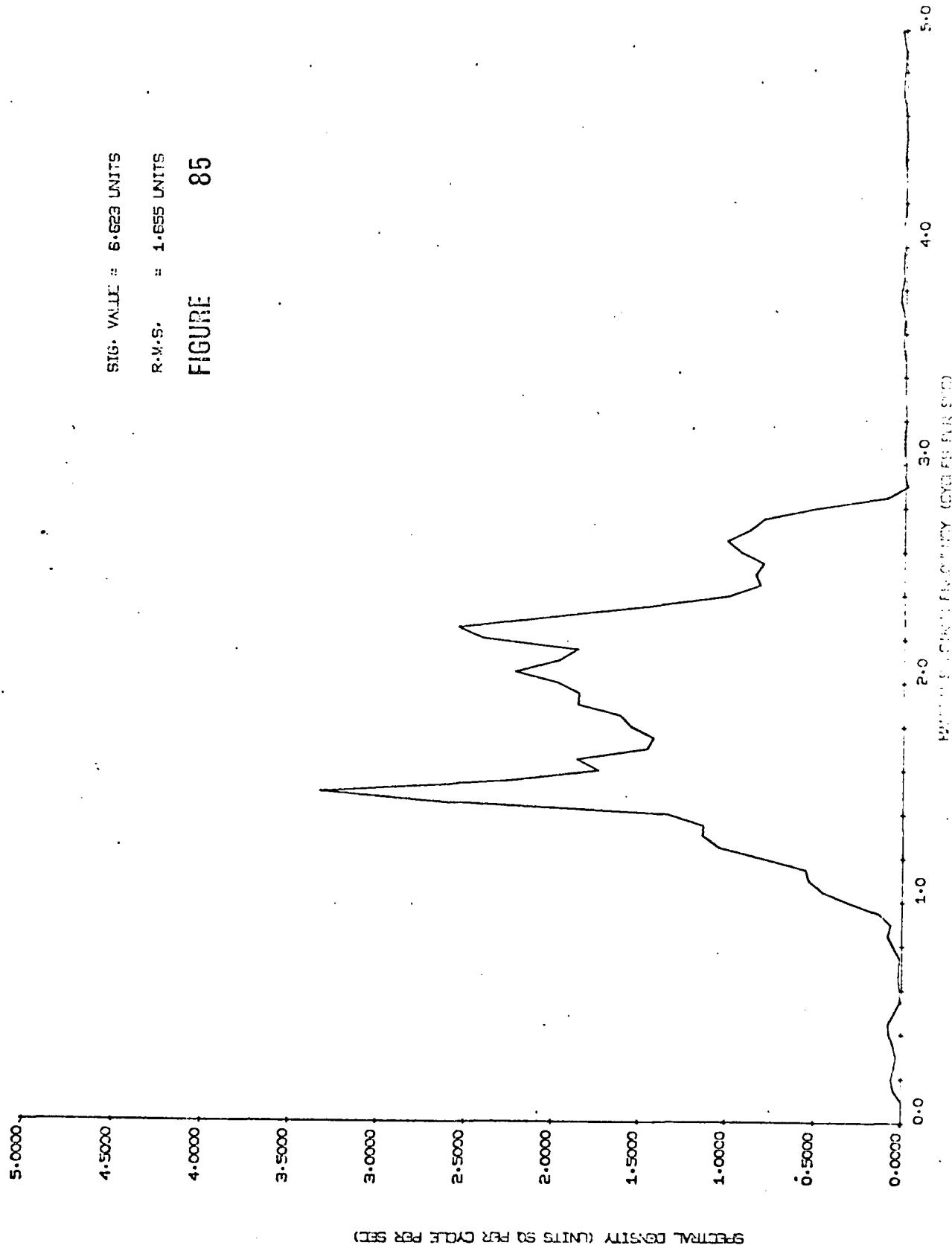
SEAKNIFE TESTS NO.1 SAT MAY '76 - RUN 92B VERT-G AT EDV SPECTRUM



SEAKNITE TESTS NO.1 SAT MAY 30, 1976 - RUN 923 ENCOUNTERED WAVE SPECTRUM - UNITS CM/S

SIG. VALUE = 6.623 UNITS  
R.M.S. = 1.655 UNITS

FIGURE 85



SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN E29 PITCH SPECTRUM - UNITS DEGREES

5.0000

4.5000

4.0000

3.5000

3.0000

2.5000

2.0000

1.5000

1.0000

0.5000

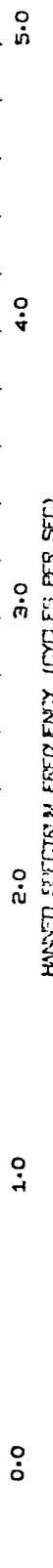
0.0000

SIG. VALUE = 4.431 UNITS

R.M.S. = 1.122 UNITS

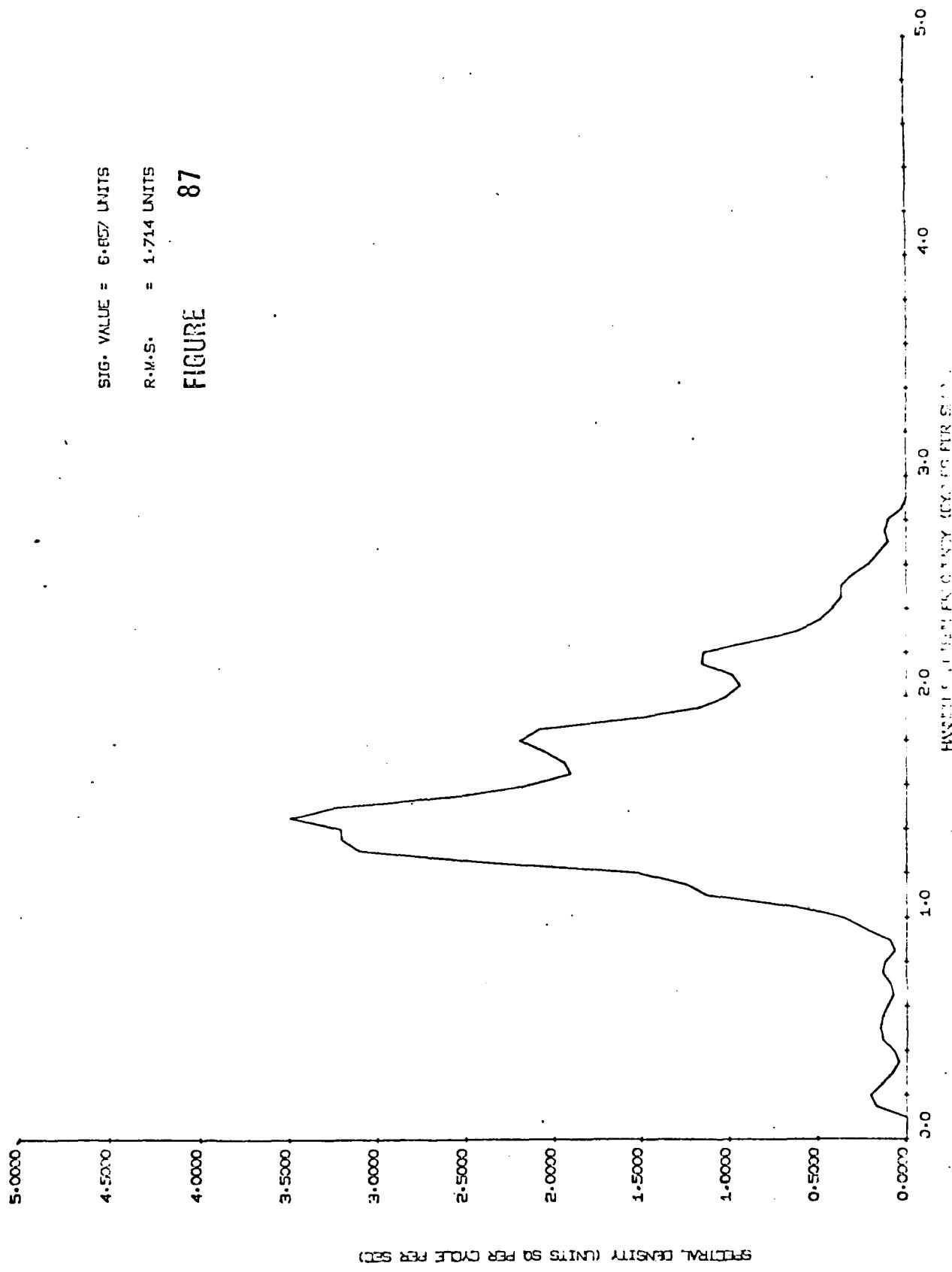
FIGURE 86

SPECTRAL DENSITY (UNITS SD PER CYCLE PER SEC)

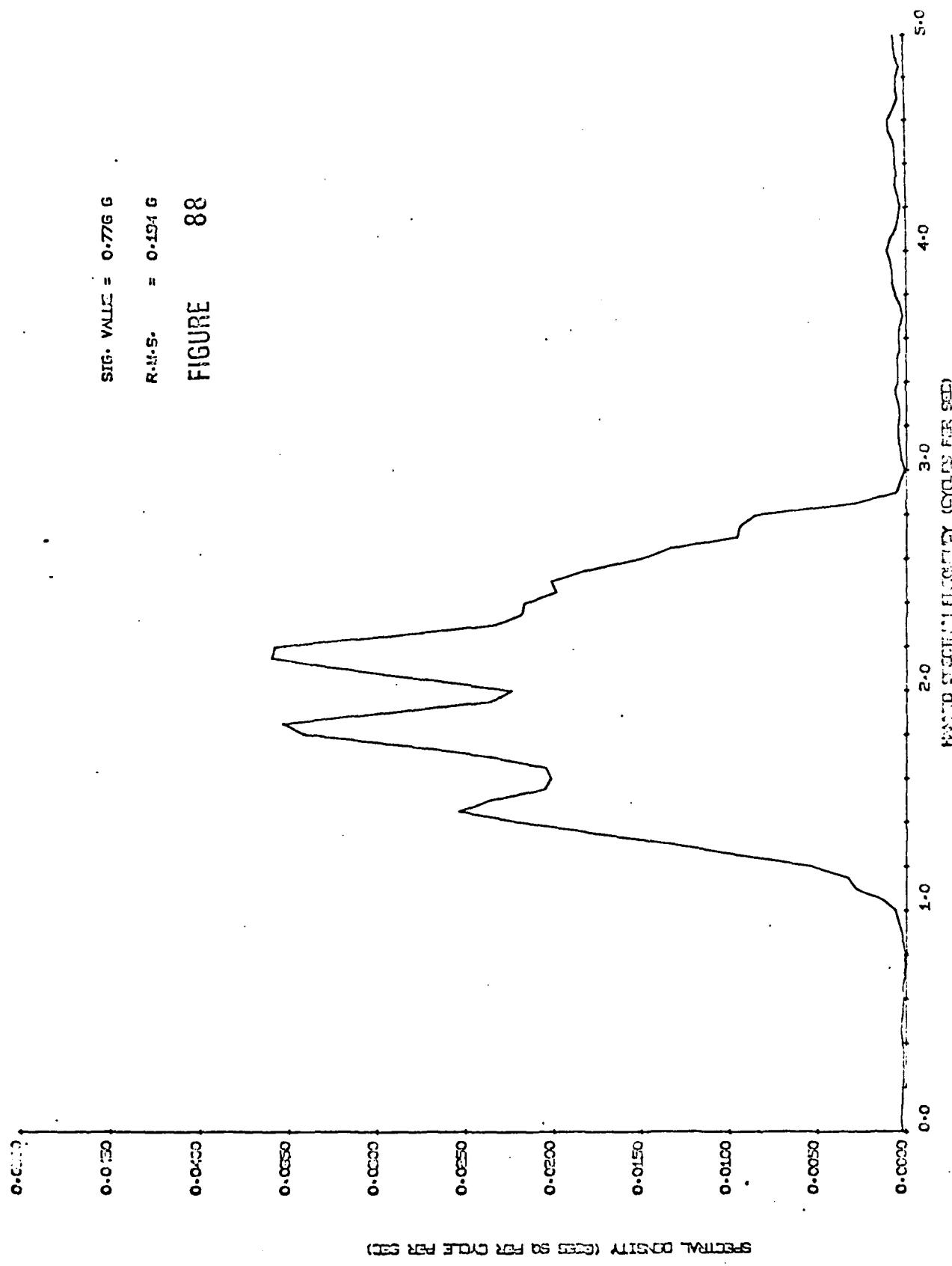


HARVESTED FREQUENCY (CYCLES PER SEC)

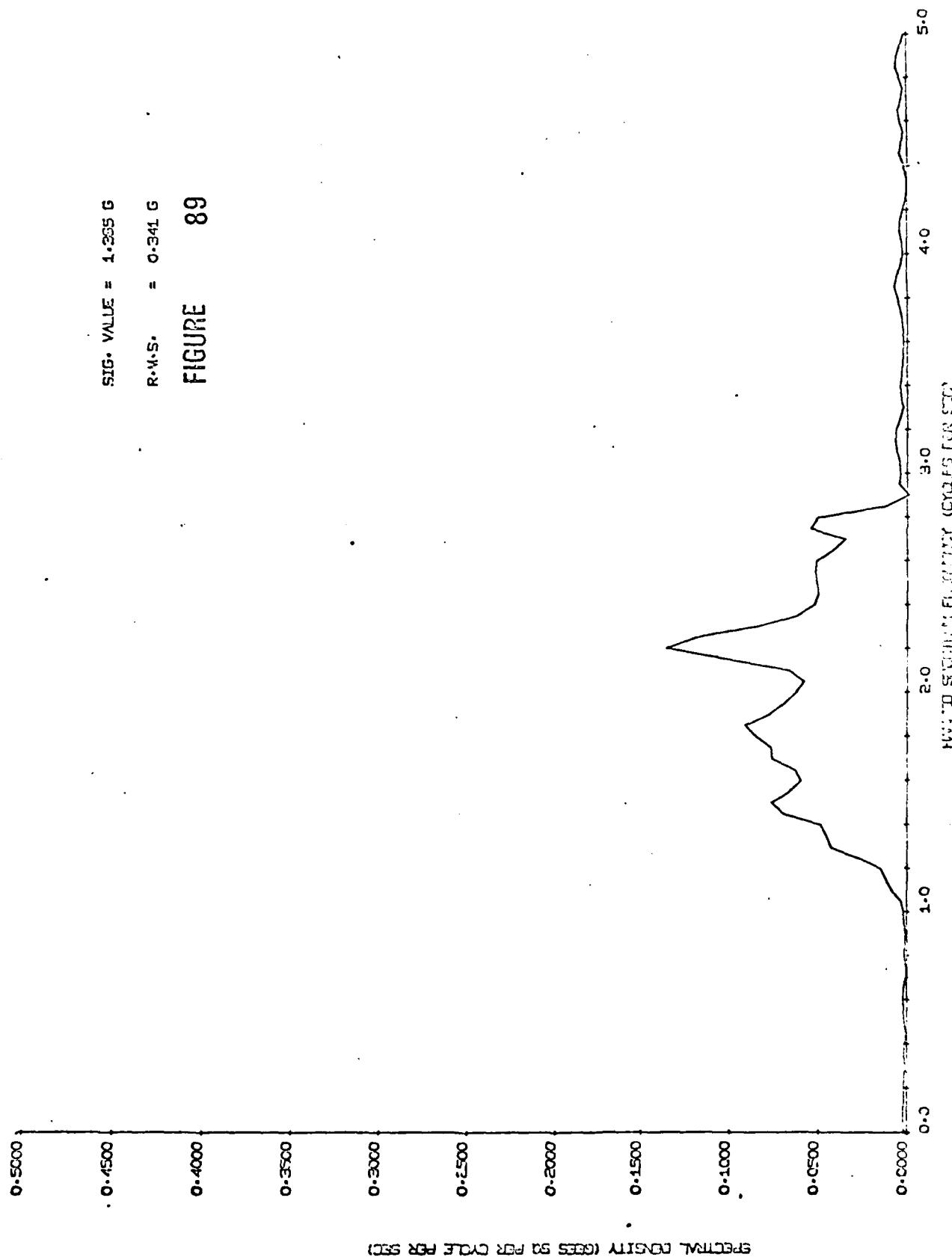
SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN 929 HEAVE SPECTRUM - UNITS CENTIMETRES



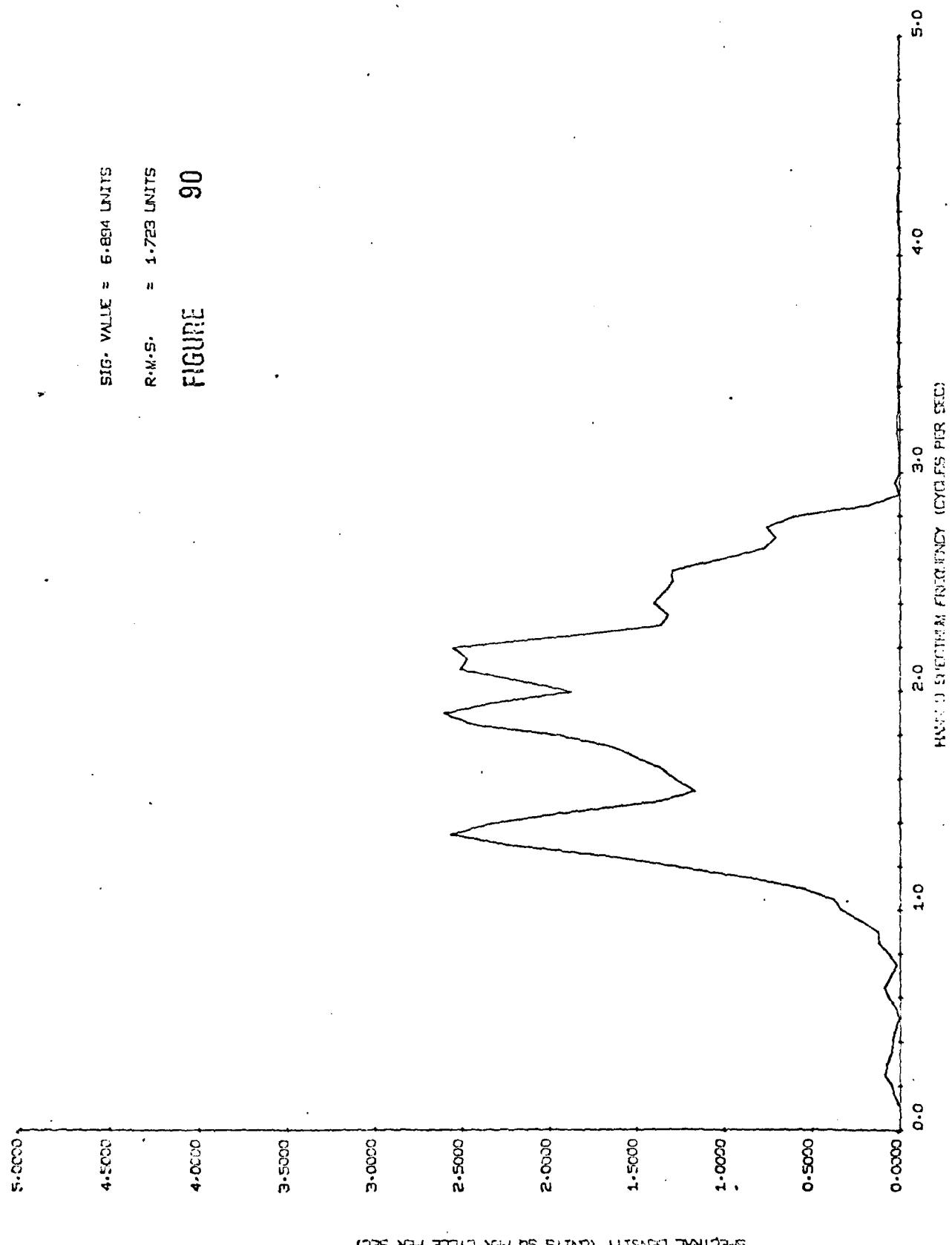
SEAKNITE TESTS NO. 1 SAT MAY '76 - RUN 300 VOLTS AT C.G. SECTION A



SEVENFE TESTS NO.1 SAT MAY '76 - RUN SEC9 VERT.G AT 80W SPECTRUM



SEAGLIDE TESTS NO.1 SAT MAY '76 - RUN 845 ENCOUNTERED WAVE SPECTRUM - UNITS CMS.

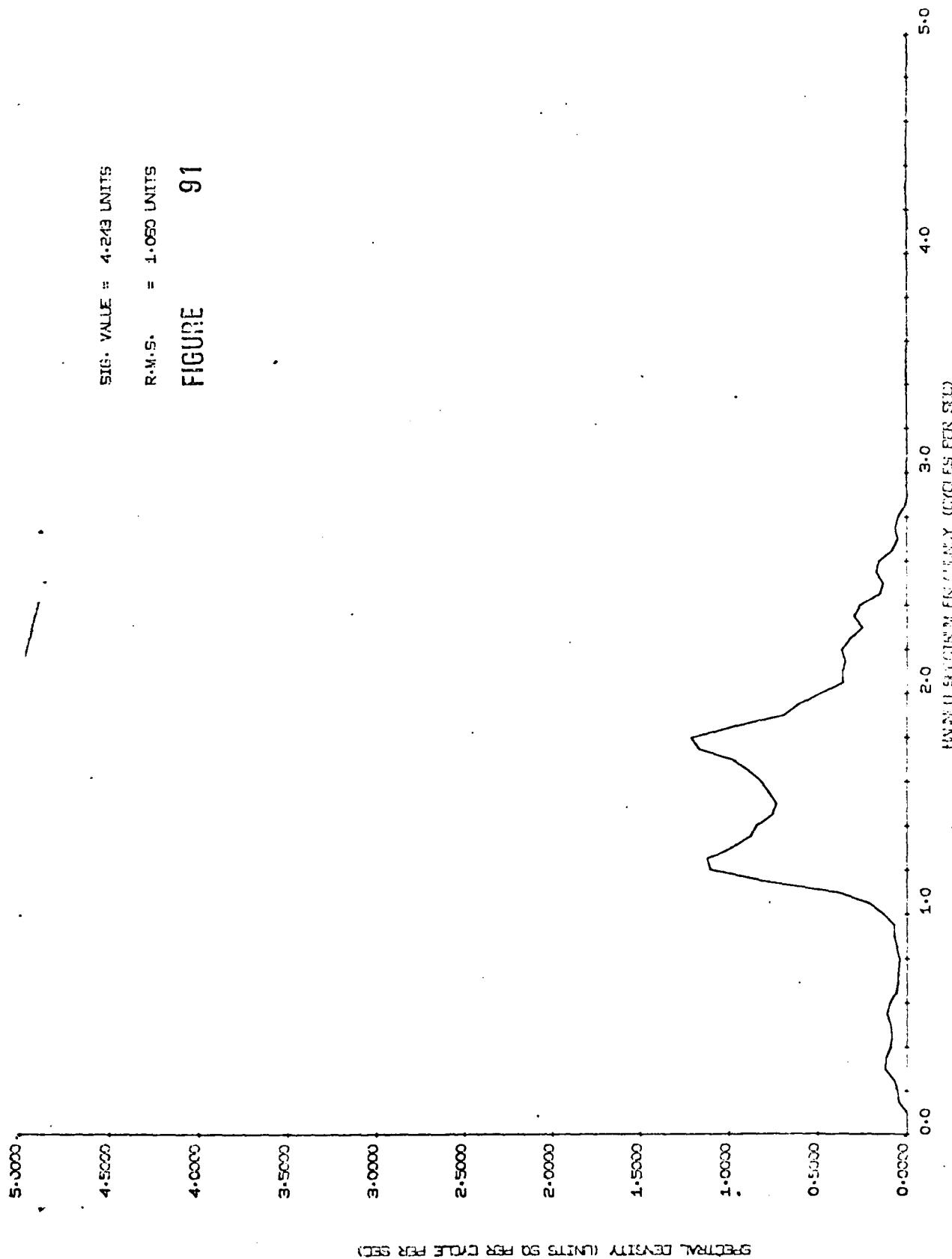


SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN 300 PITCH SPECTRUM - UNITS DEGREES

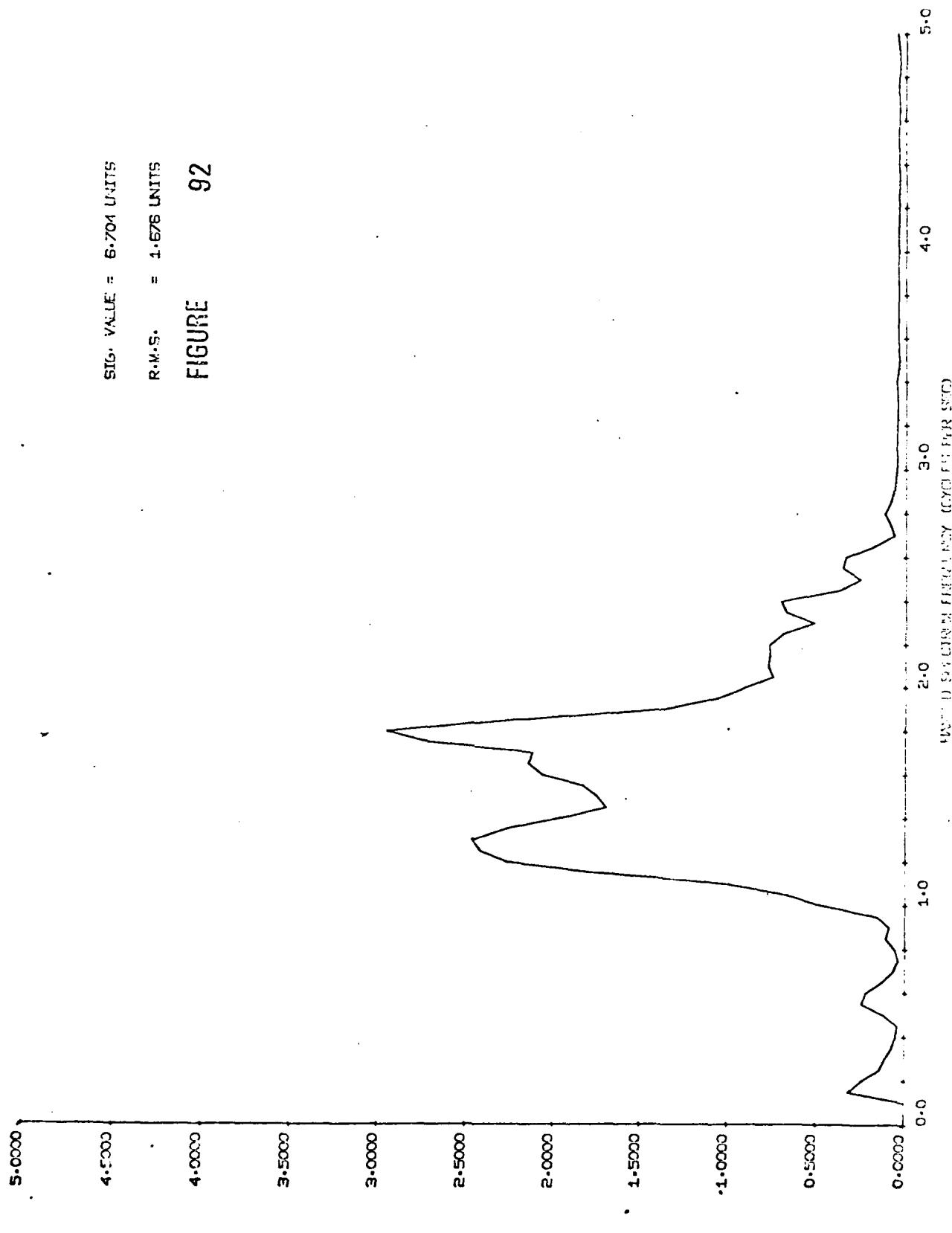
SIG. VALUE = 4.243 UNITS

R.M.S. = 1.060 UNITS

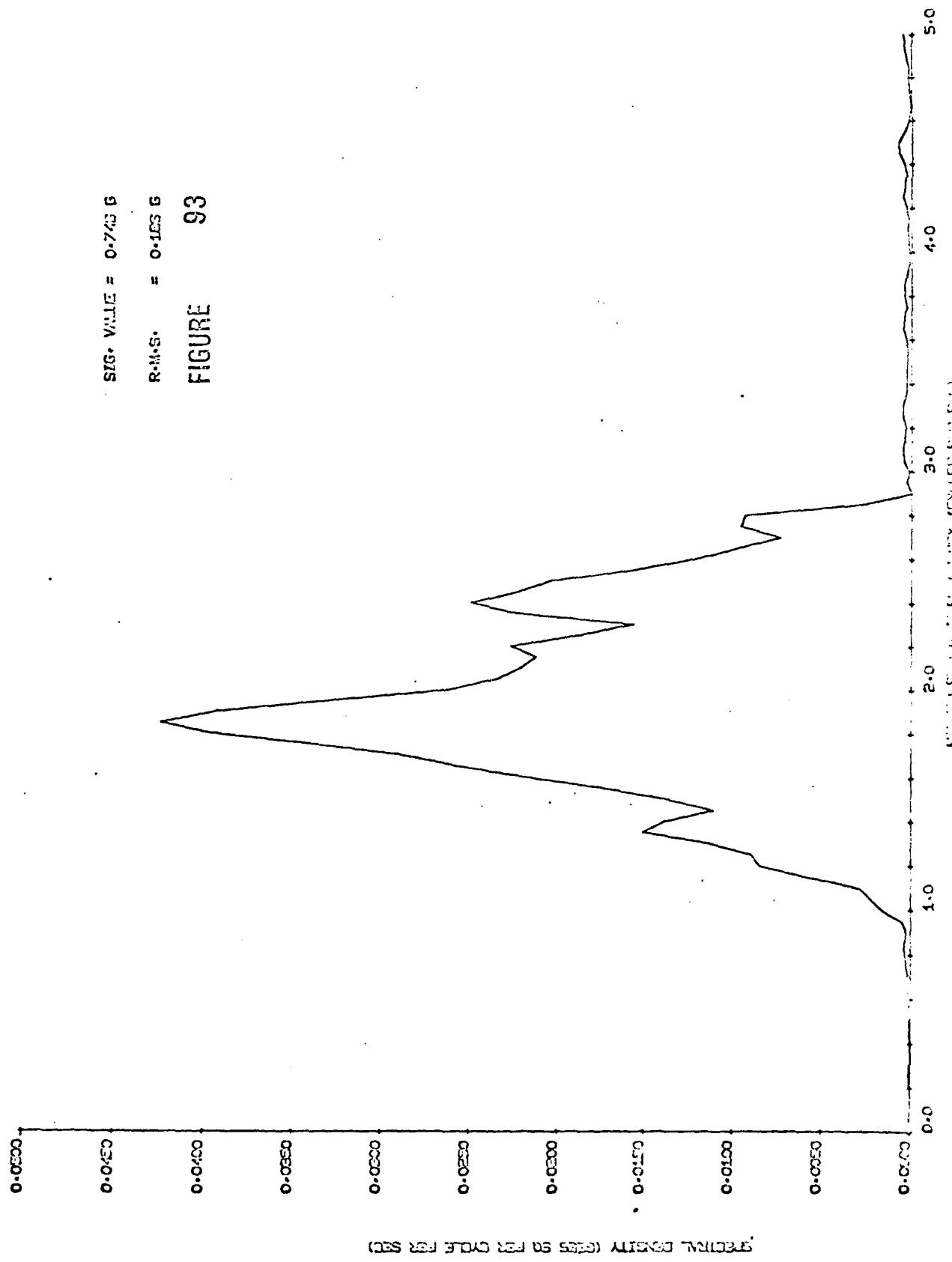
FIGURE 91



SEAKNIFE TESTS NO. 1 S/M - RUN 930 HEAVE SPECTRUM - UNITS CENTIMETRES



SCANNING TESTS NO. 1 SET MAY 1976 - RUN 530 VERT. G AT C.G. SECTION



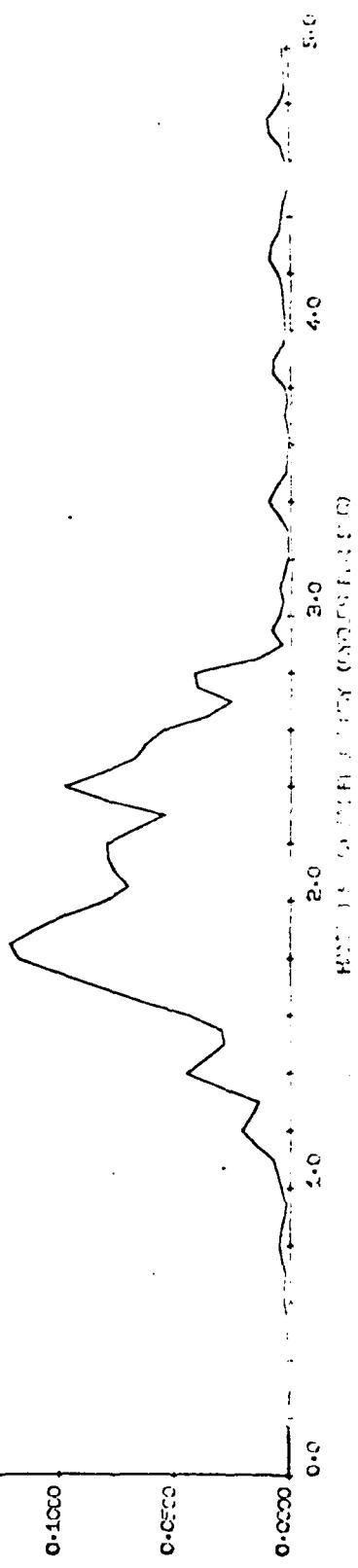


FIGURE 94

REGRESSION = 0.3996

SIG. VALUE = 4.3276

DATA FOR 1.00E+00 - MAX 0.70 - RINGING - SAWTOOTH WAVEFORM - UNITS CMS

5. 330.1

4.500.0

4.000.0

3.500.0

3.000.0

2.500.0

2.000.0

1.500.0

1.000.0

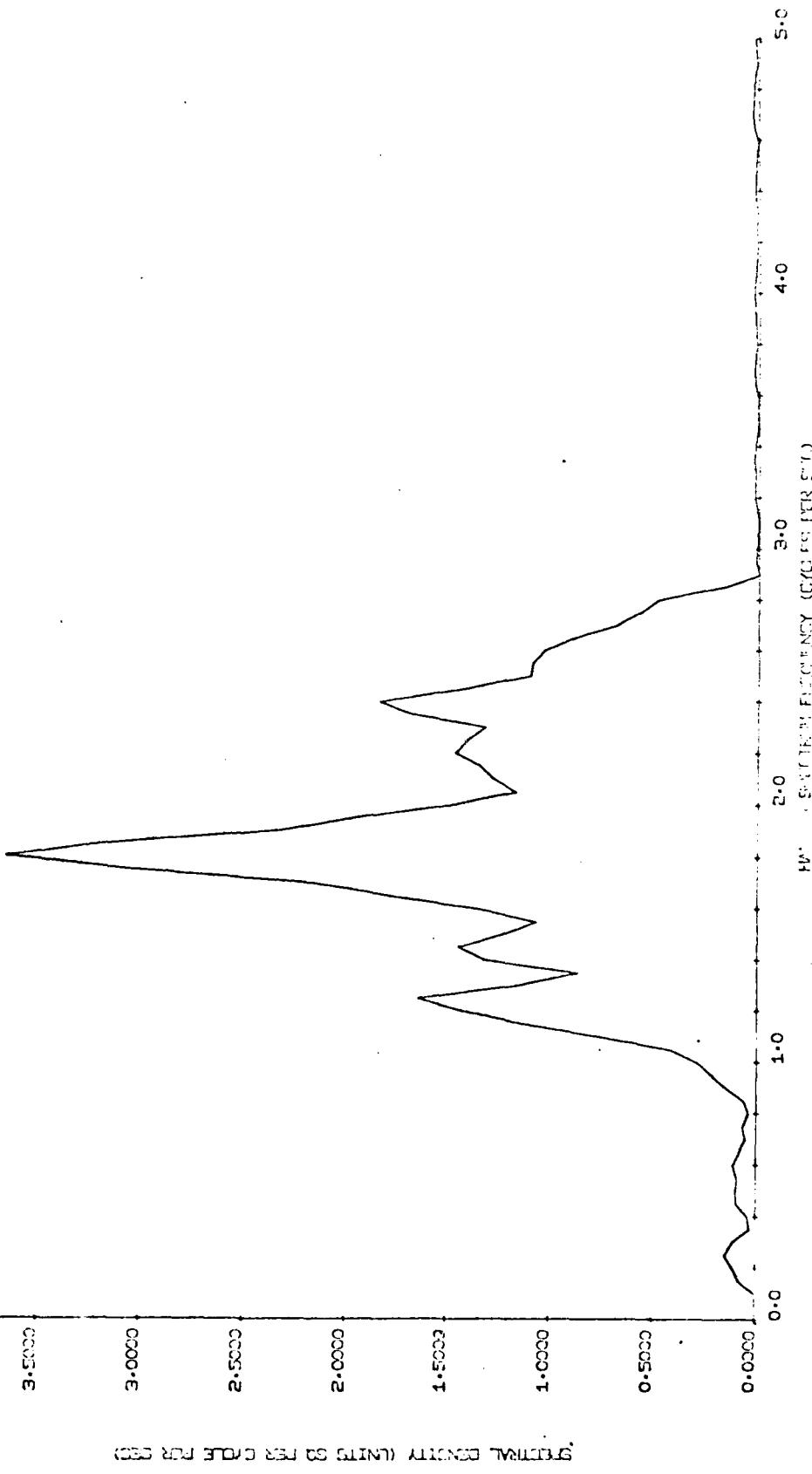
0.500.0

0.000.0

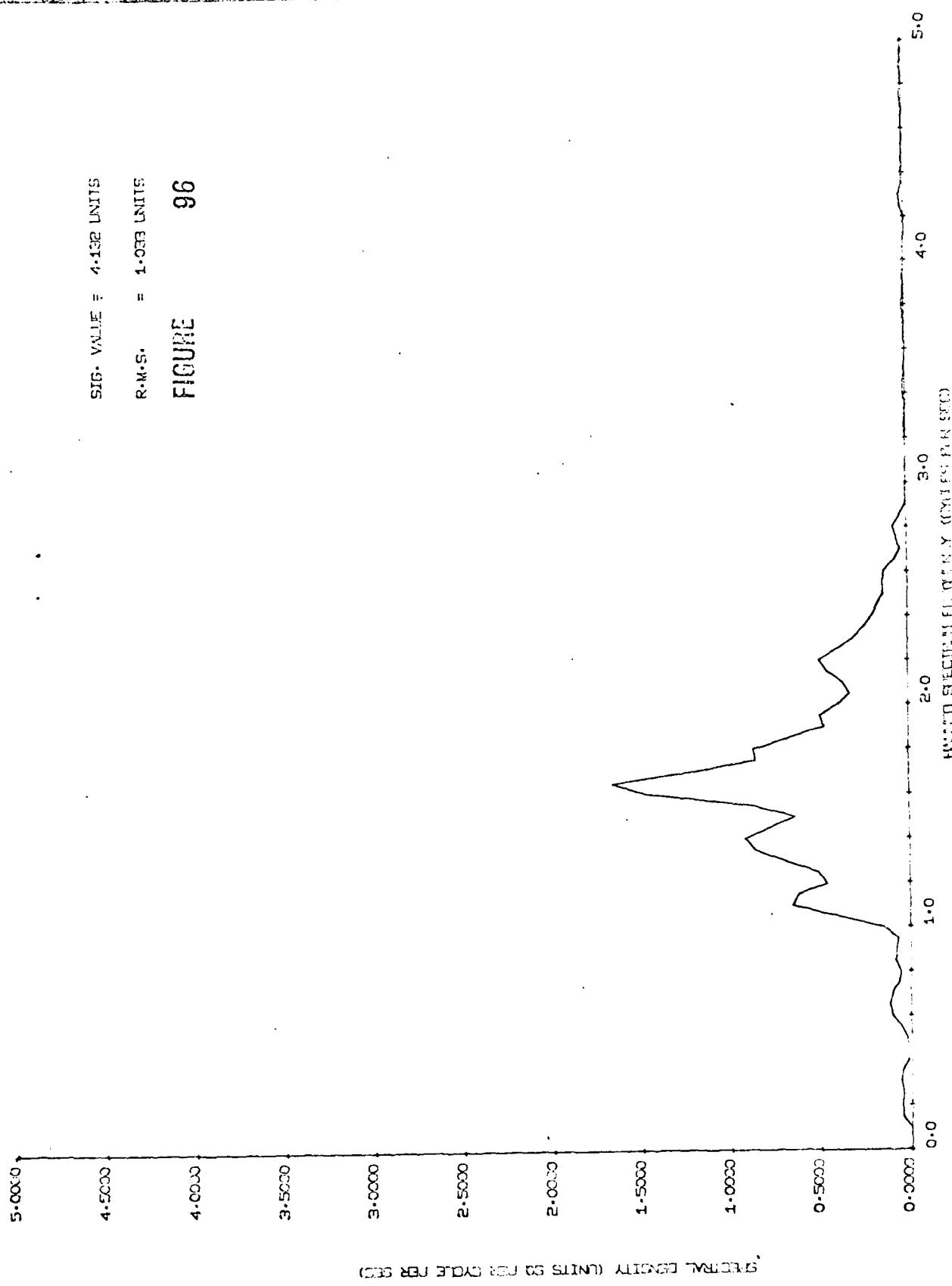
SIG. VALUE = 6.655 UNITS

R.M.S. = 1.663 UNITS

FIGURE  
95



SHARKNIFE TESTS NO.1 S/T MAY '76 - RUN 531 PITCH SPECTRUM - UNITS OF INCHES



AD-A081 565

ADMIRALTY EXPERIMENT WORKS HASLAR (ENGLAND)  
SEA KNIFE ANALYSIS OF SELECTED SEAKEEPING DATA. VOLUME 2. FIGUR--ETC(U)  
NOV 76 M A HAMMOND, K NICHOLSON  
N68171-76-V-9910

ML

UNCLASSIFIED

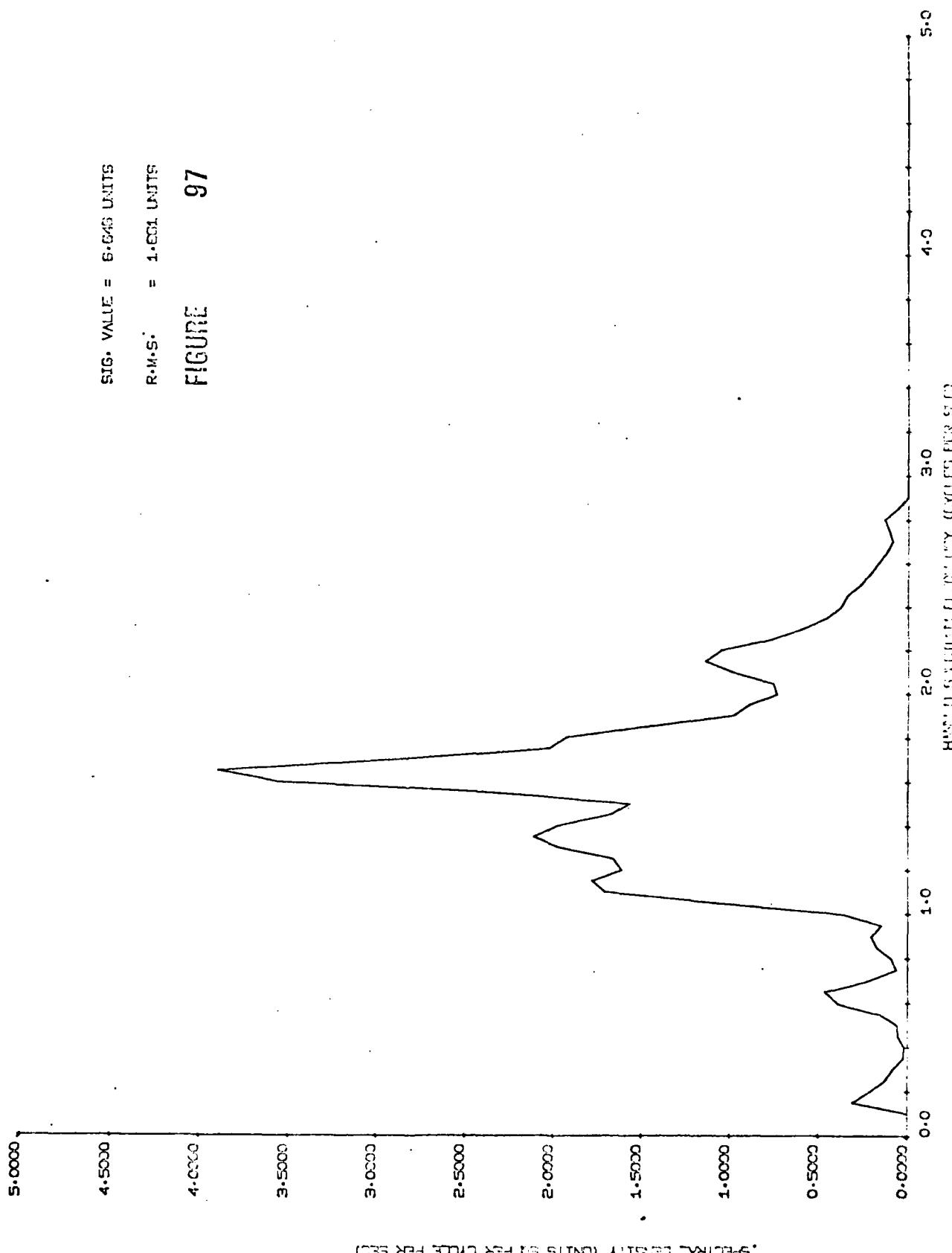
AEW-TR-N76034-VOL-2

2 of 2

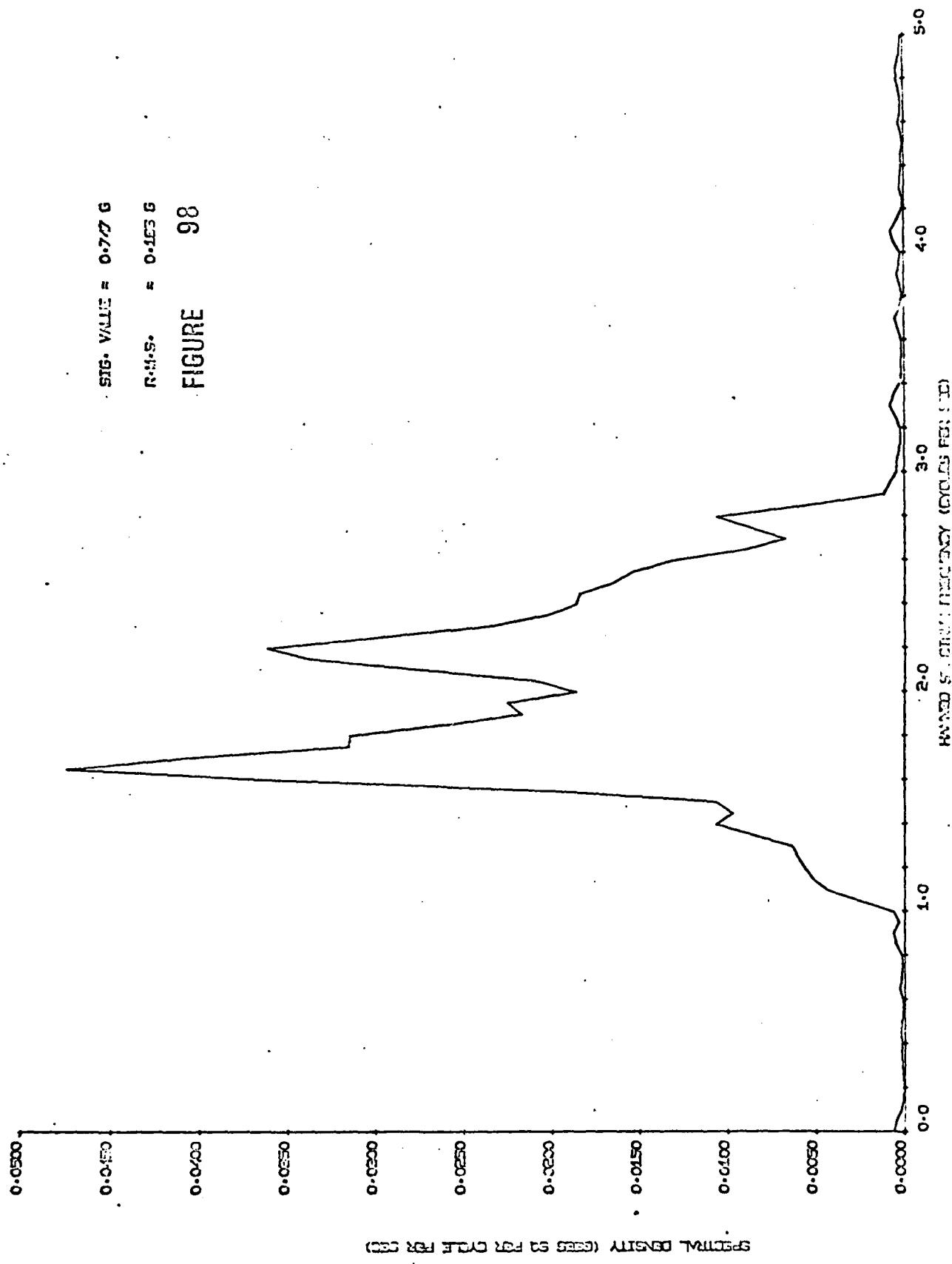
47  
August 5

END  
4-80  
DTIC

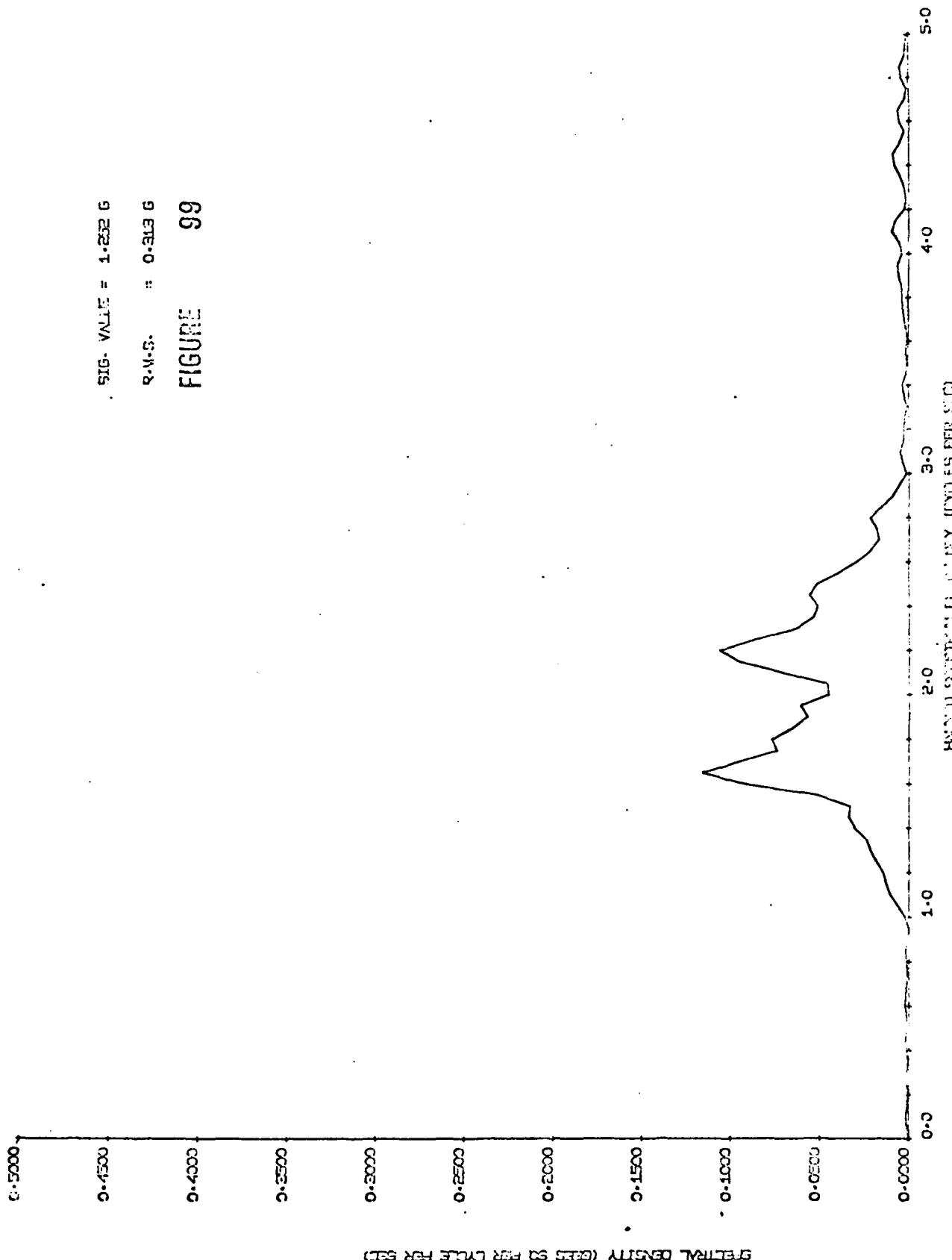
SPECIFIC HEAT - RUN 931 HEAT SECTION - UNITS CENTIMETERS



SEAWINITE TESTS NO.1 S/T MAY '76 - RN 231 VERT.G AT C.G. SPECTRUM



SWANHILL TESTS NO.1 SAT MAY 176 - RUN 934 VERT. 6 AT 800' SPECTRUM

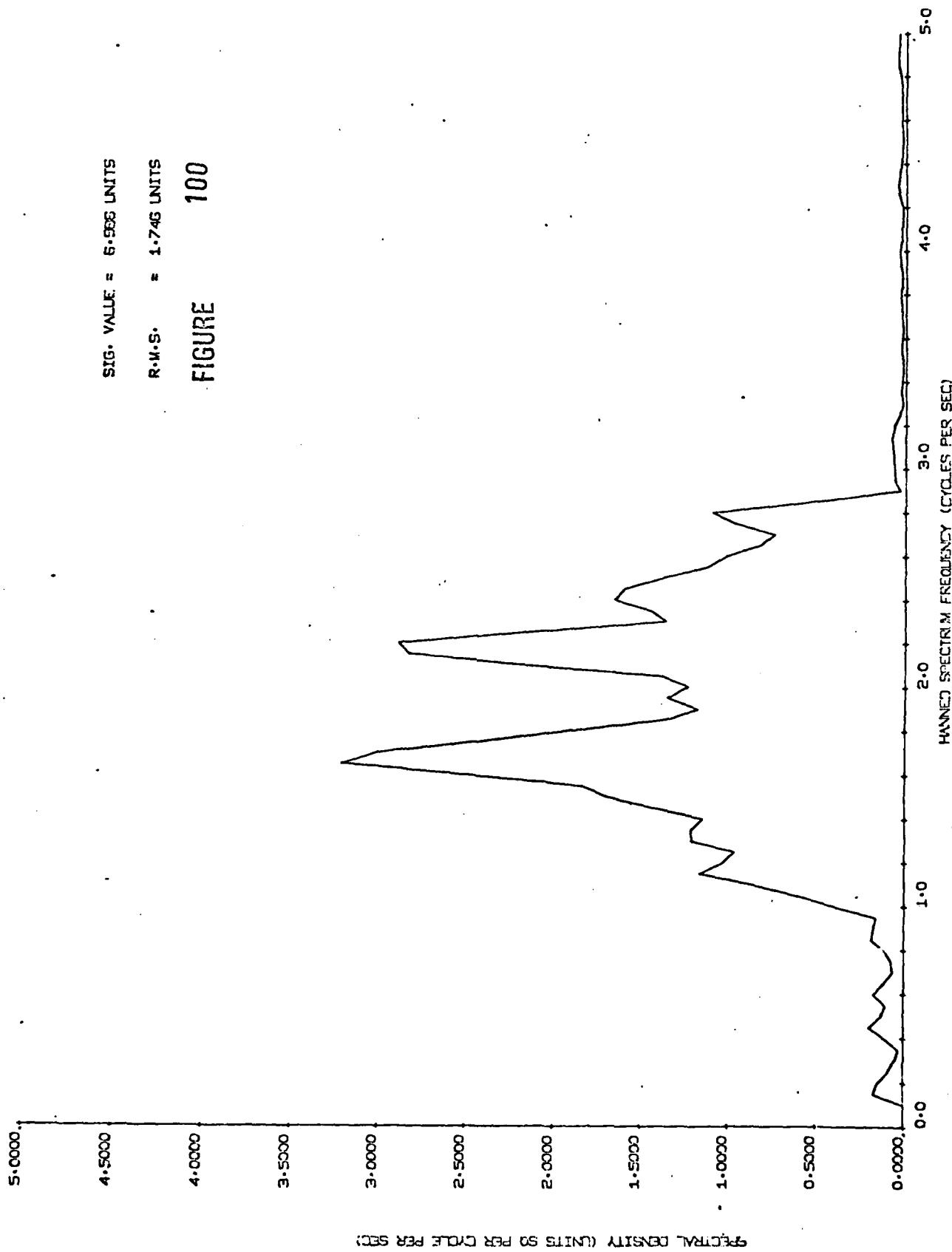


SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN 931 ENCOUNTERED WAVE SPECTRUM - UNITS CMS

SIG. VALUE = 6.966 UNITS

R.M.S. = 1.746 UNITS

FIGURE  
100



SEVENNE TESTS NO.1 SUT MAY '76 - RIN 900 PITCH SECTION UNITS DEGREES

0.000

0.1500

0.3000

0.4500

0.6000

0.7500

0.9000

1.0500

1.2000

1.3500

1.5000

SPECTRAL ENERGY (UNITS SQ PER CYCLE PER SEC)

SIG. VALUE = 3.145 UNITS  
R.M.S. = 0.723 UNITS

FIGURE 101

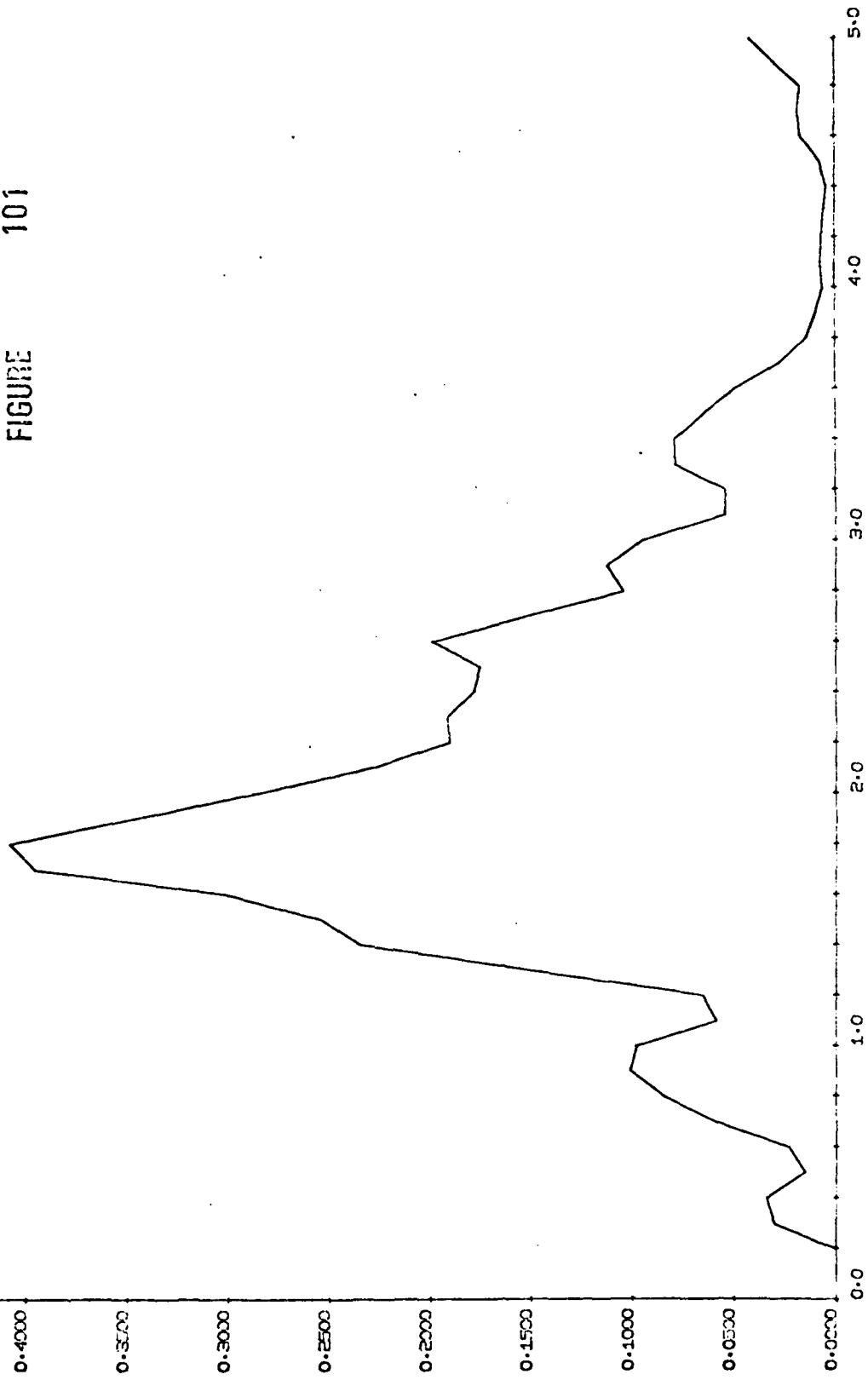


CHART NO. 101, FIGURE 101, RIN 900 PITCH SECTION

TESTS NO. 1, 5/T MAY, '76 - RUN 935 HEAVE SPECTRUM UNITS CENTIMETRES

5.000

4.500

4.000

3.500

3.000

2.500

2.000

1.500

1.000

0.500

0.000

SIG. VALUE = 7.545 UNITS

R.M.S. = 1.686 UNITS

FIGURE 102

SPECTRAL DENSITY (UNITS 50 PER CYCLE PER SEC)

HARVESTING FREQUENCY (CYCLES PER SEC)

5.0

1.0

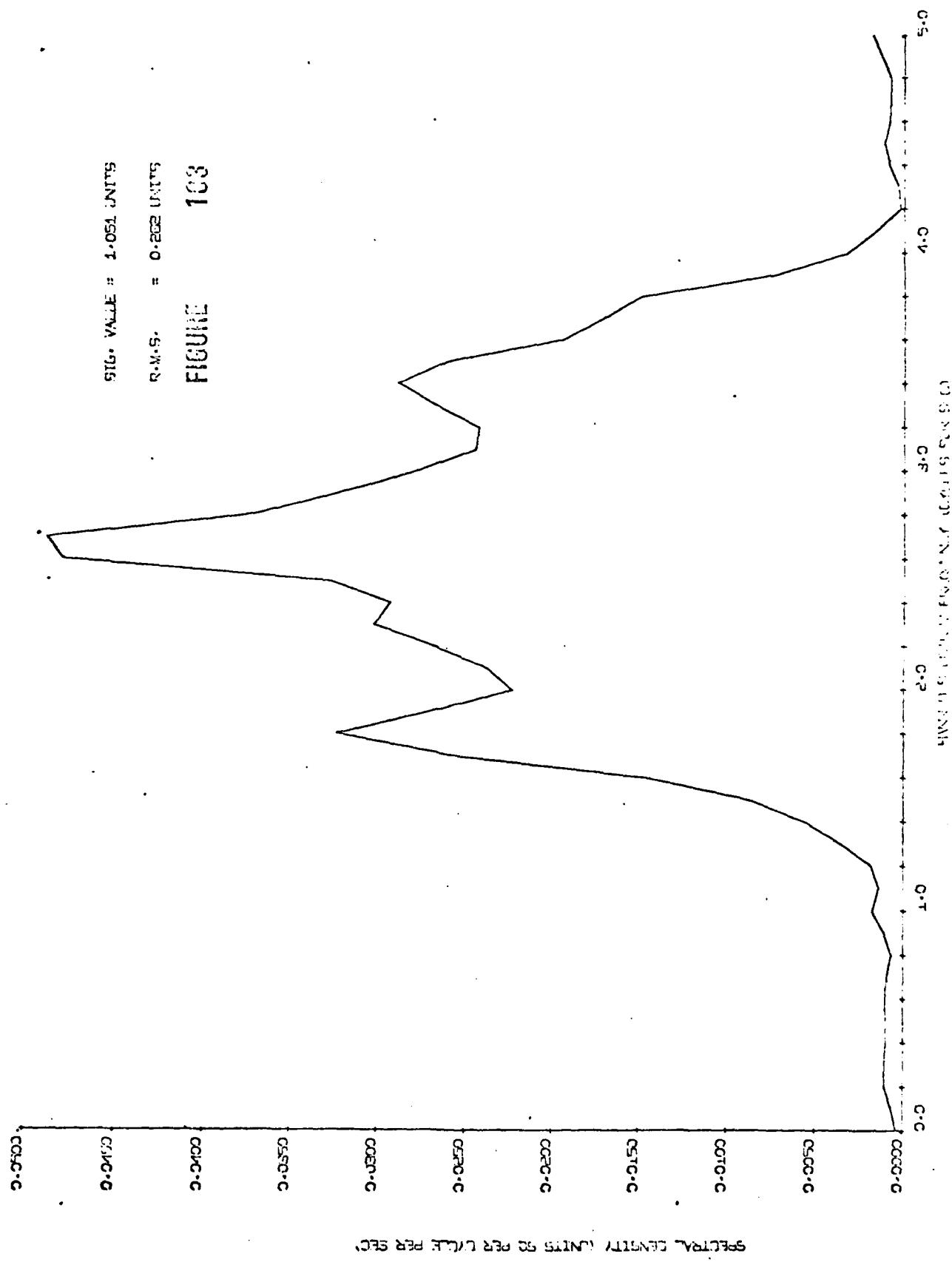
2.0

3.0

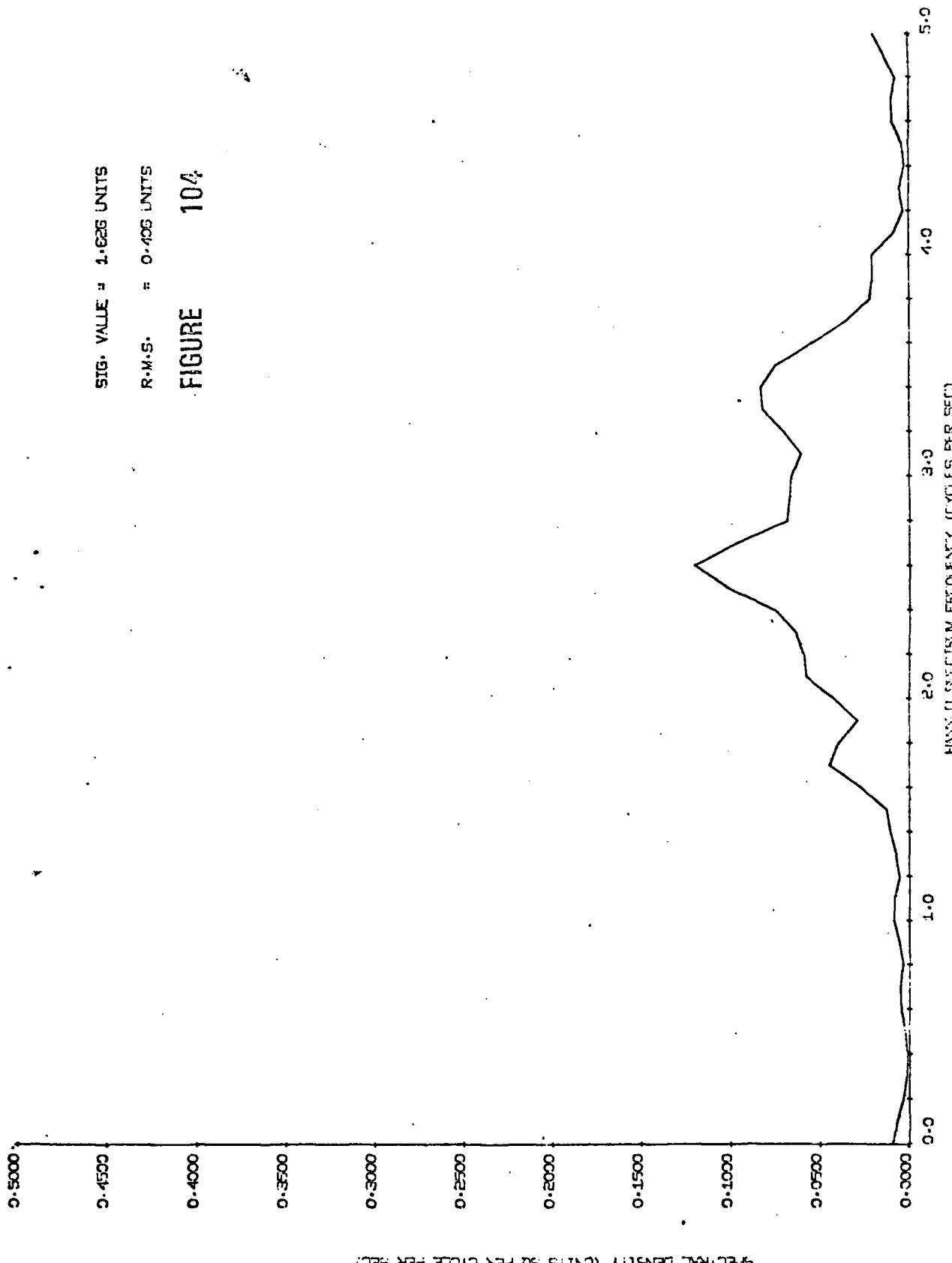
4.0

5.0

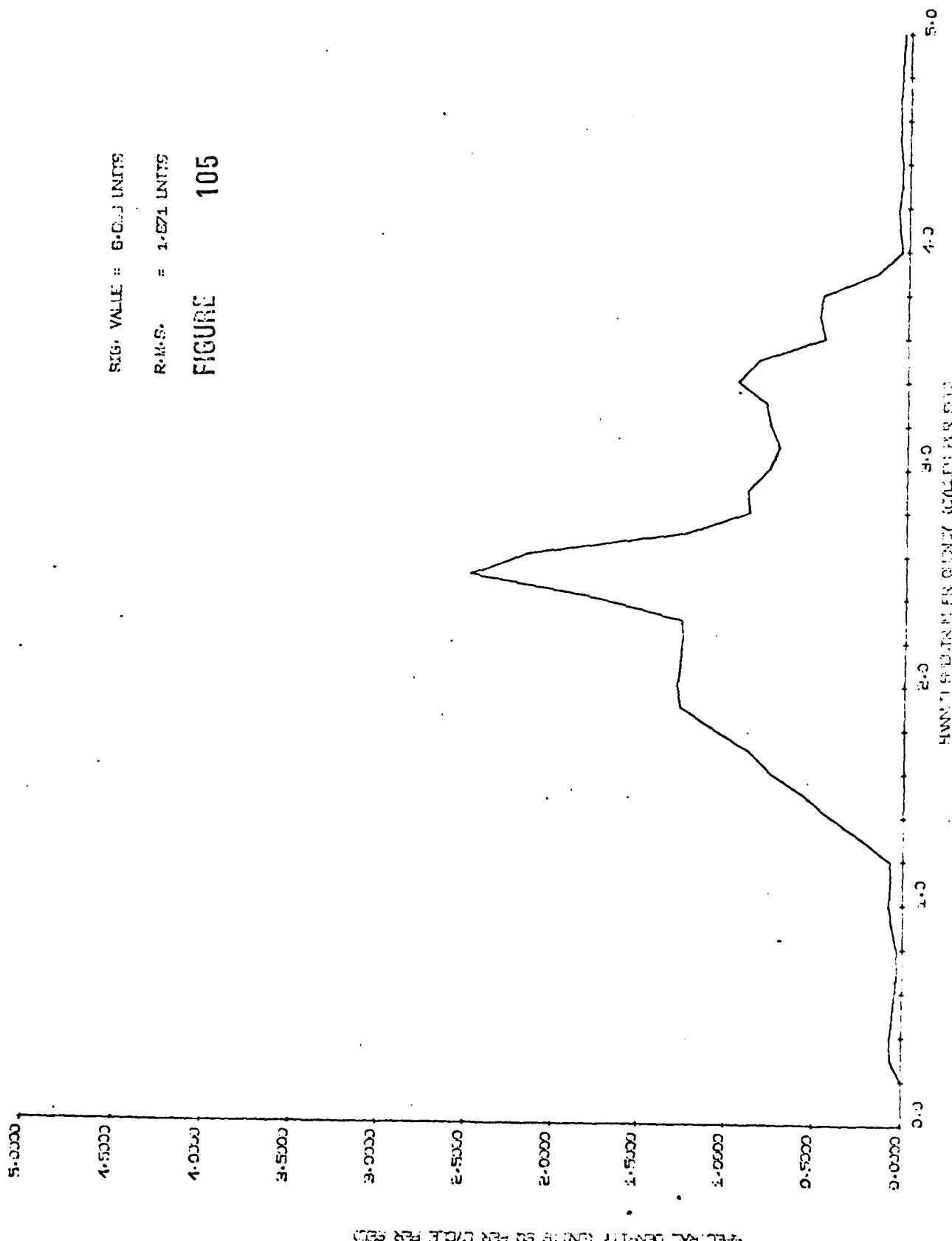
SEARCHED NO.1 SET MAY 26 1935 VERT. G AT C.G. SPECTRUM UNITS 6.5



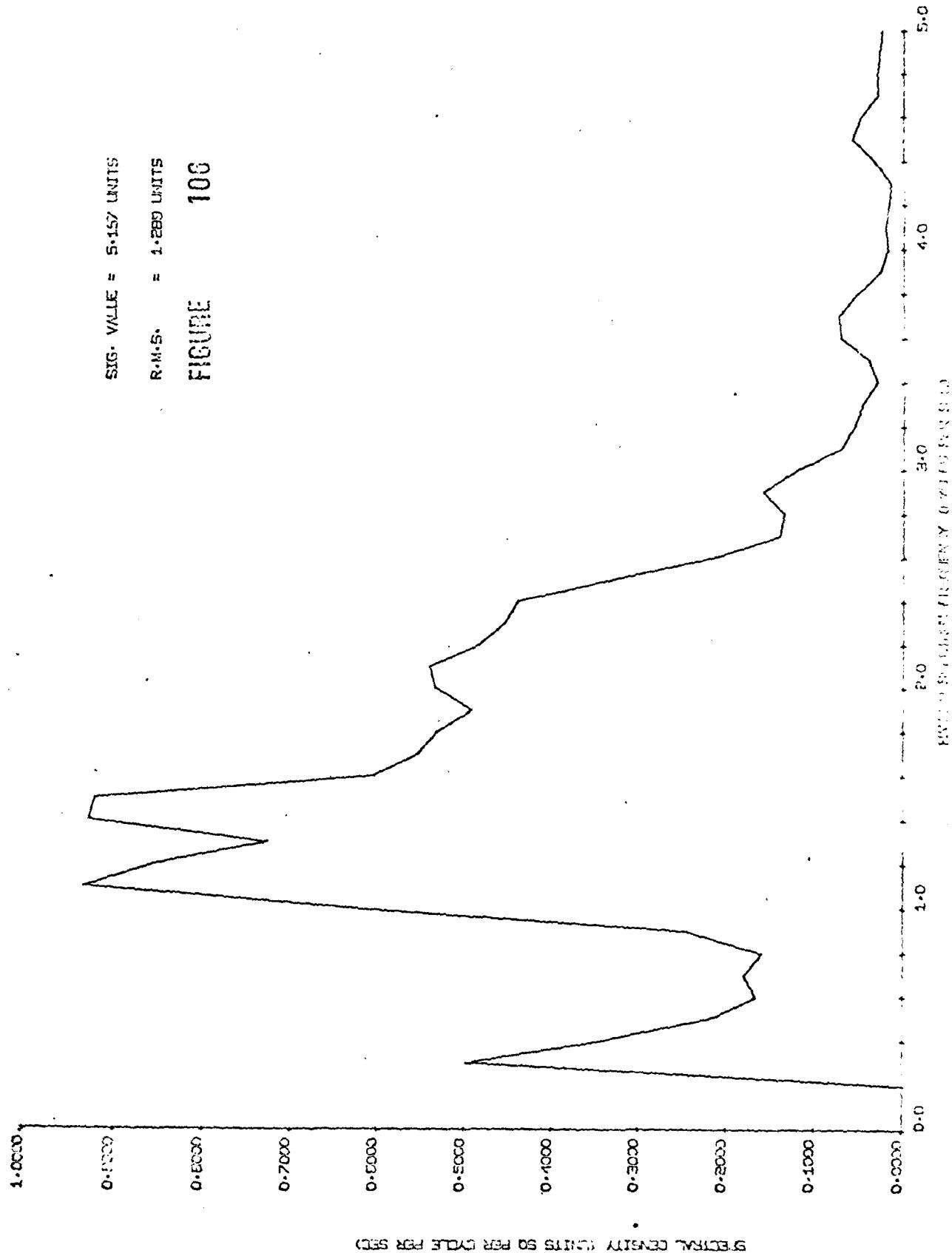
SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN 935 VERT.6 AT BOW SPECTRUM UNITS G.S



SEAKNOLE TOWER NO. 1 S.S.M. - N.W. MAY 1971 NO. 1 WAVE SPECTRUM UNITS CMS<sup>-1</sup>



SEAKNIFE TESTS NO.1 SAT MAY 26 - RUN SEC PITCH SPECTRUM UNITS DEGREES



STANDARD TESTS NO. 1, 2, 3, 4 AND 5 FOR DETERMINE SULFATE UNITS LENTZIEMERS

C.000.5

C.000.4

C.000.3

C.000.2

C.000.1

C.000.0

C.000.1

C.000.2

C.000.3

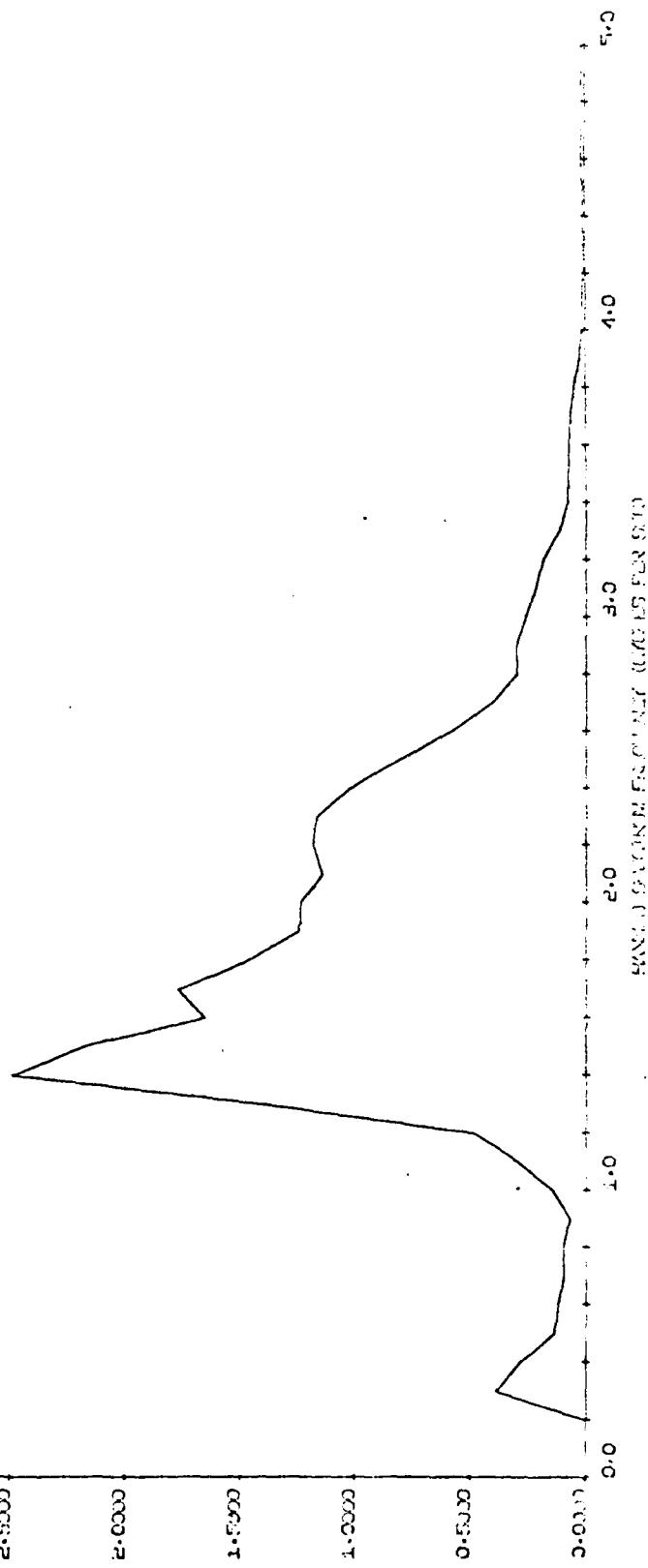
C.000.4

C.000.5

STD. VALUE = 0.064 UNITS

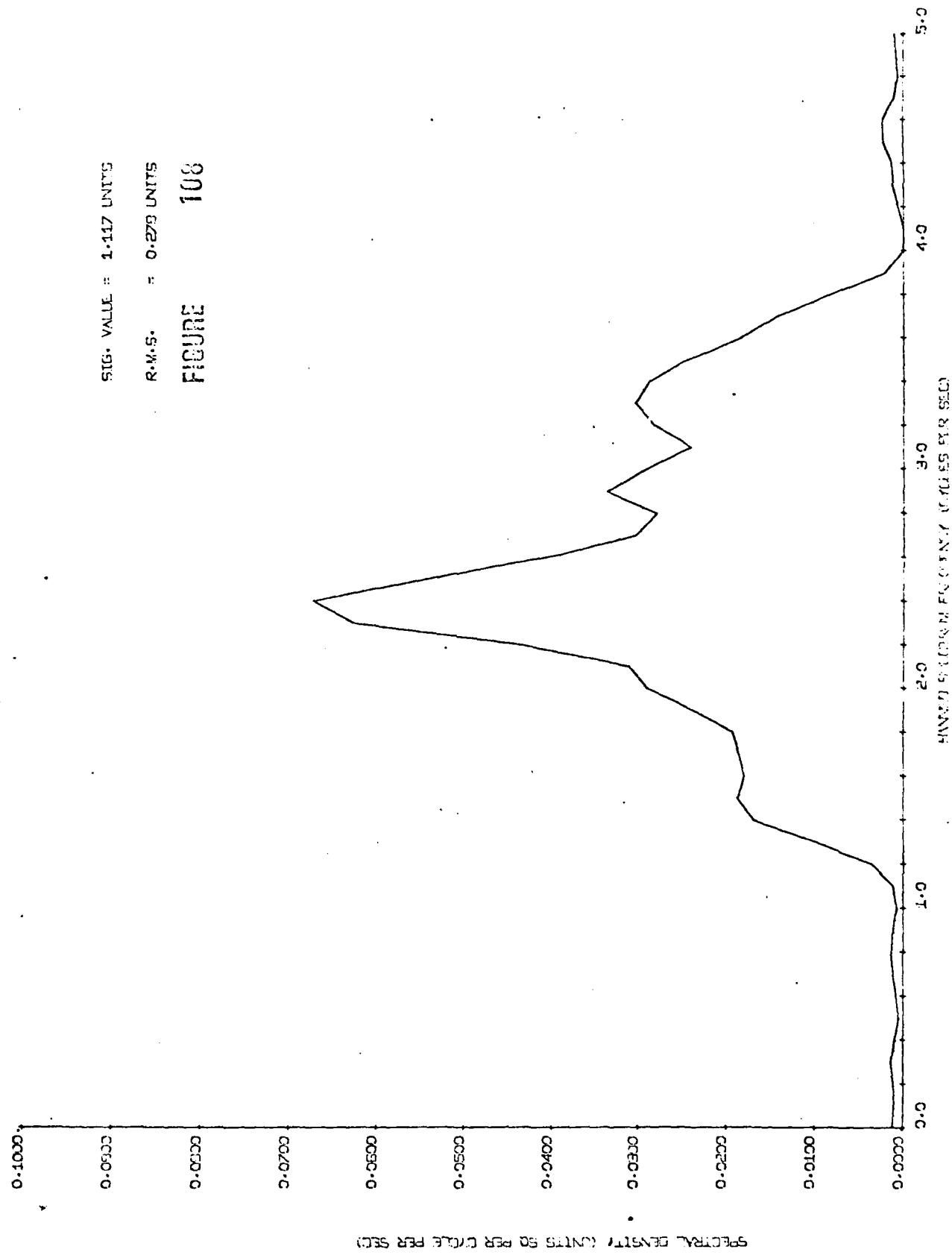
R.M.S. = 2.023 UNITS

FIGURE 107

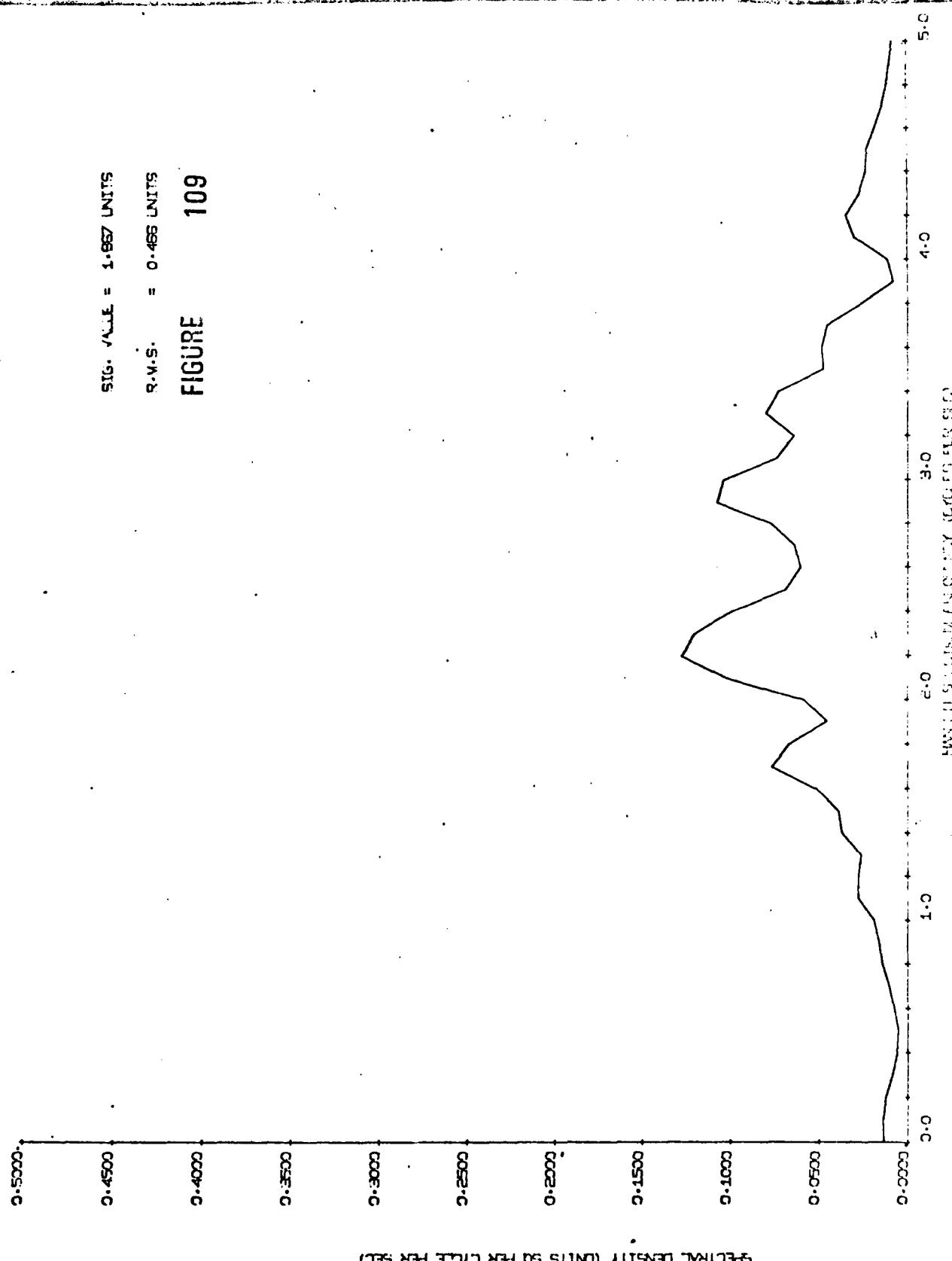


STANDARD TESTS NO. 1, 2, 3, 4 AND 5 FOR DETERMINE SULFATE UNITS LENTZIEMERS

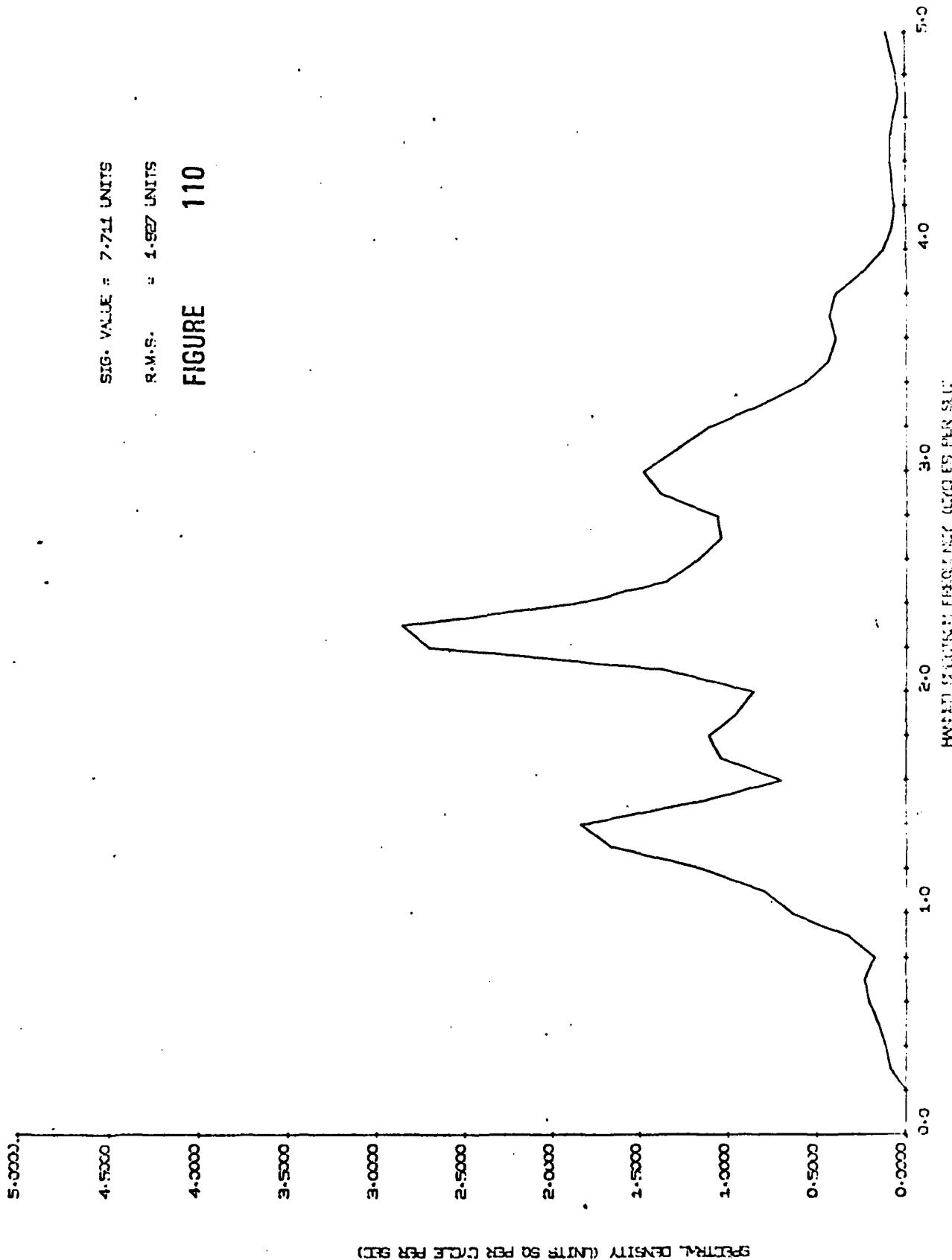
SEAKNIFE TESTS NO. 1 SAT MAY '76 - RUN 936 VERT.G AT C.G. SPECTRUM UNITS G.S



SEAKNIFE TESTS NO. 1 S/T MAY 176 - RUN 935 VERT.G AT BOW SPECTRUM UNITS G.S



SEASAT TESTS NO. 1 SAT MAY 1976 - RUN 936 ENCOUNTERED WAVE SPECTRUM UNITS CMS

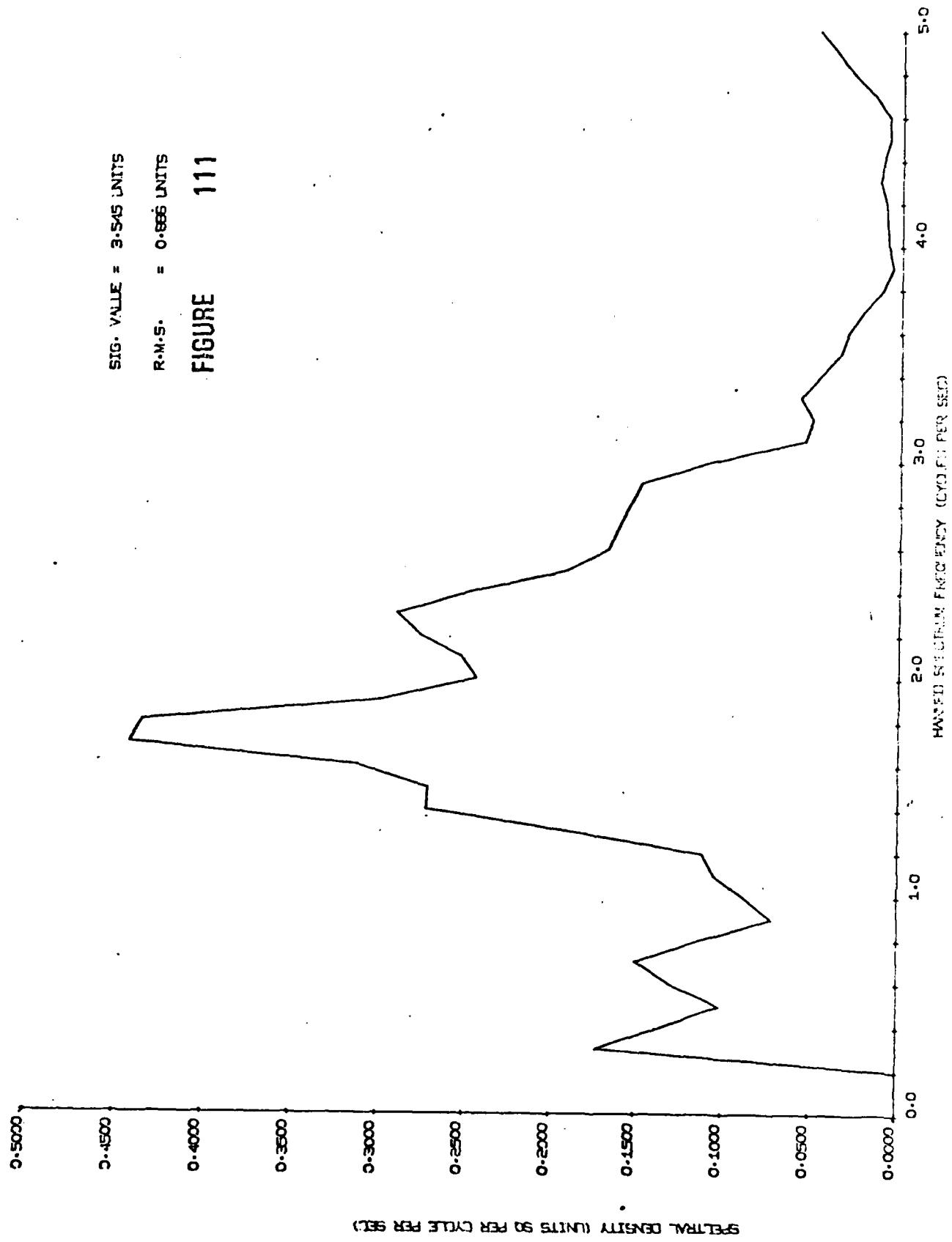


SLACKNIFE TESTS NO.1 SAT MAY '76 - RUN 9a/ PITCH SPECTRUM UNITS DEGREES

SIG. VALUE = 3.545 UNITS

R.M.S. = 0.885 UNITS

FIGURE 111

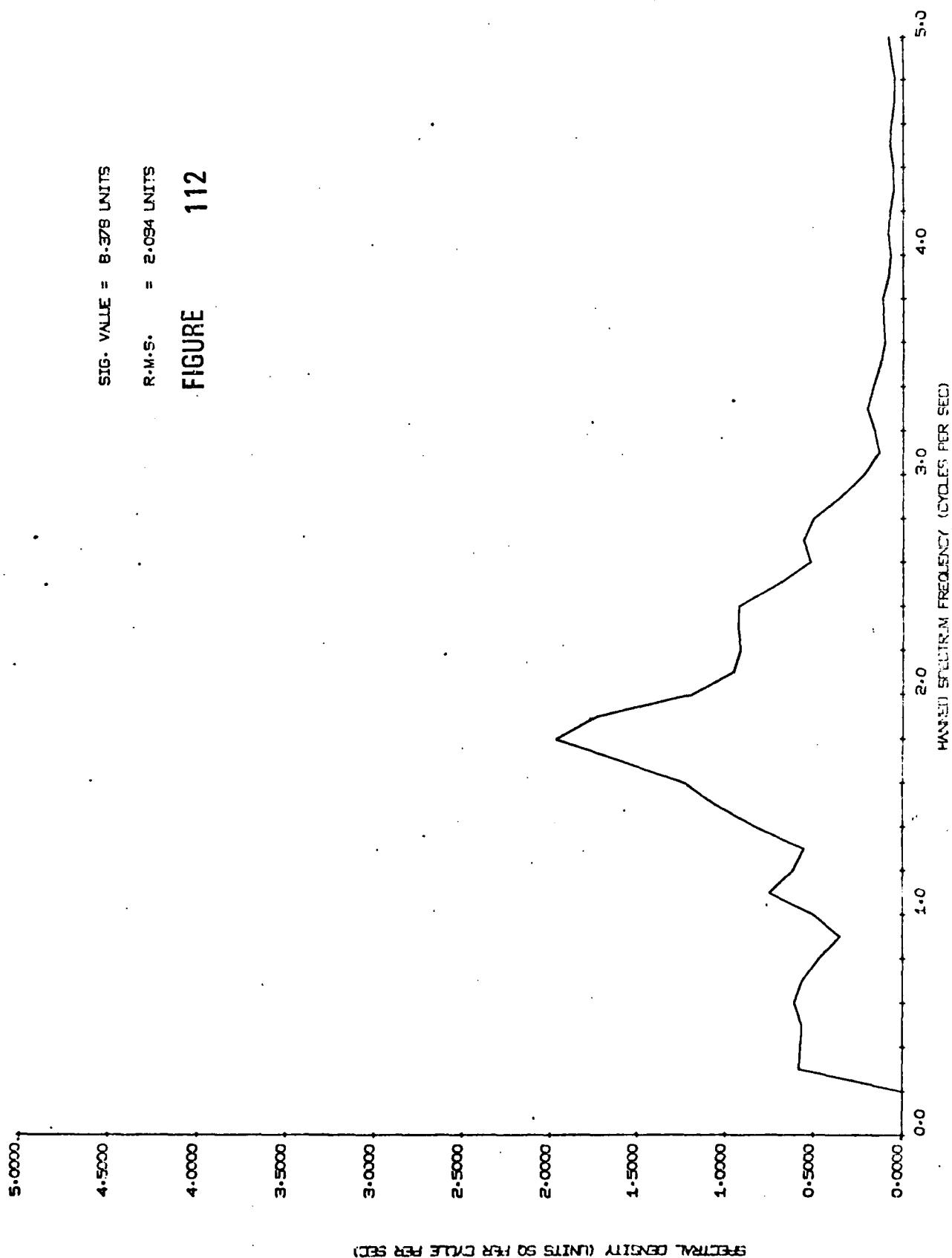


SEAWIND TESTS NO.1 S/T MAY '76 - RUN 937 HULL SECTION UNITS CENTIMETRES

SIG. VALUE = 8.378 UNITS  
R.M.S. = 2.094 UNITS

FIGURE 112

FIGURE

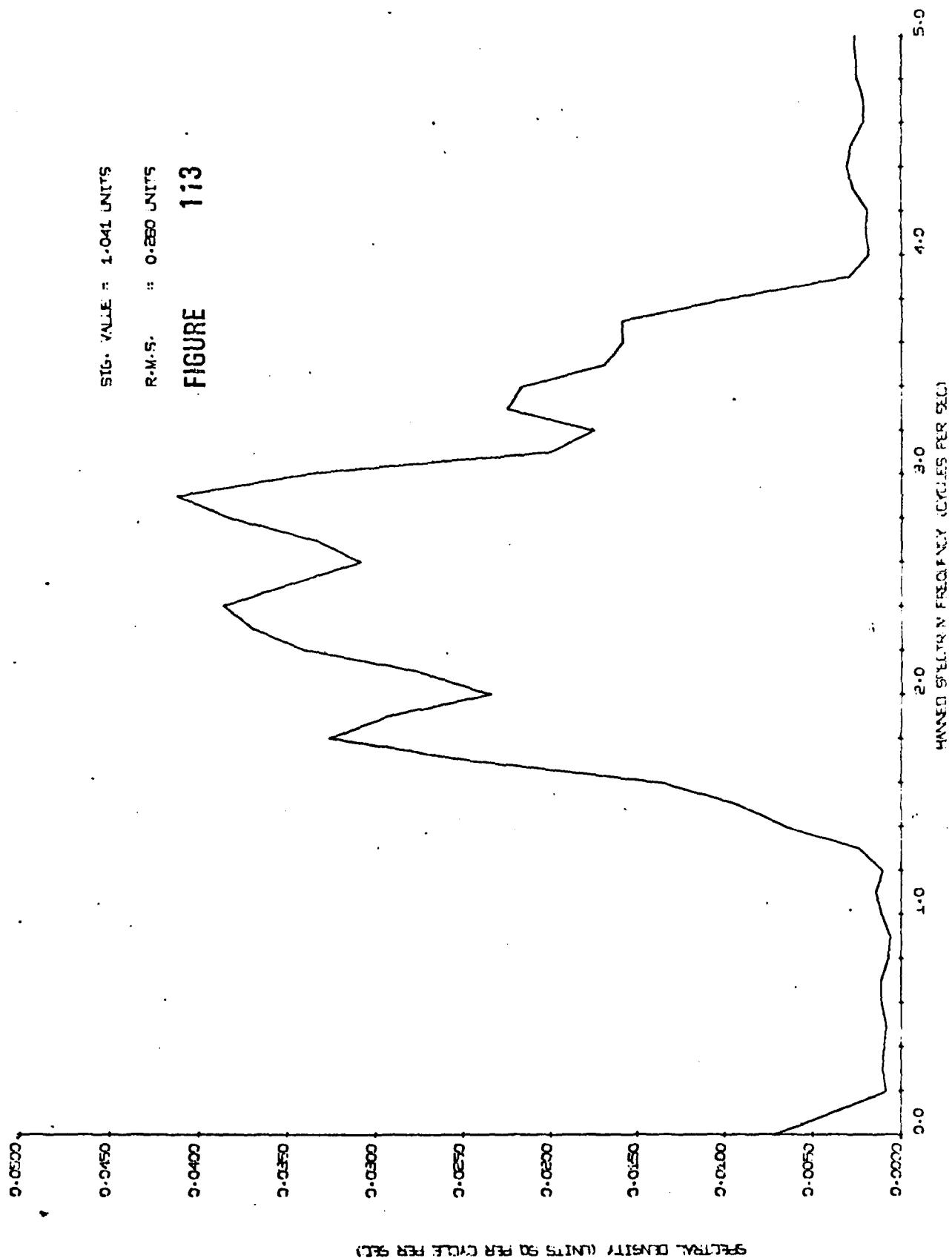


SEAKNITE TESTS NO. 1 SET MAY '76 - RUN 93 / VERT. G AT C.G. SPECTRUM UNITS G.S

SIG. VALUE = 1.041 UNITS

R.M.S. " 0.260 UNITS

FIGURE  
113



SEAKNIFE TESTS NO.1 S/T MAY '76 - RUN 937 VERT.G AT 80W SPECTRUM UNITS G.S

